

MANUFACTURERS' RECORD

Weekly Southern Industrial and Hardware Newspaper.

XIII No. 2.
WEEKLY.

BALTIMORE, FEBRUARY 18, 1888.

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Report of the AQUEDUCT Commissioners.

(NEW CROTON AQUEDUCT, NEW YORK.)

AN ELABORATE VOLUME, CONTAINING AUTHORITATIVE TABLES BY THE CHIEF ENG., B. S. CHURCH. JUST ISSUED.

PLANT (by actual count from Table 13.)
 Number of Ingersoll Drills used..... 243
 Number of Drills of all other kinds..... 103

PROGRESS (by actual figures from Table 8.)
 Average weekly progress in best 10 headings that used Ingersoll Drills exclusively (omitting all idle weeks)..... 38.73
 Average weekly progress in best 10 headings that used other drills exclusively (omitting all idle weeks) 31.88
 DIFFERENCE OF 20 PER CENT. IN FAVOR OF INGERSOLL DRILLS.

All headings where Ingersoll Drills were used exclusively have been completed, except the section under Harlem River, now being driven by Ingersoll Drills and Air Compressors. Send for description of Aqueduct, with Engineers' Tables of Progress and Catalogue. Sent free. We have procured a limited number of the Report of the Aqueduct Commissioners, and will send them by express on receipt of \$5, actual cost to us.

INGERSOLL ROCK DRILL CO.,
 10 Park Place, New York City.

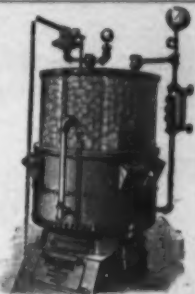


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 96 LIBERTY STREET, NEW YORK.



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21 S. CHARLES STREET, BALTIMORE. Write for New Machinery Catalogue. LEATHER AND RUBBER BELTING, Cotton and Woolen Mill Supplies. LATHES, PLANERS, DRILLS, Engines, Shapers, Gear Cutters, &c.



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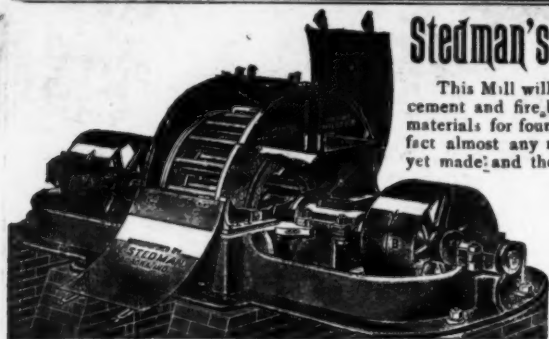
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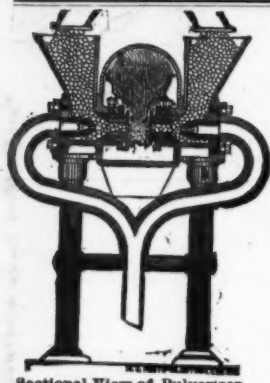


Stedman's Improved Disintegrator and Pulverizer.

This Mill will disintegrate or pulverize materials of all kinds, for brick and tile, for cement and fire brick, and slag from open air furnaces for use in rolling mills, and materials for foundry facings, iron ores, animal matter in almost all conditions—in fact almost any material that can be disintegrated. It is an improvement over any yet made; and the result of practical experience.

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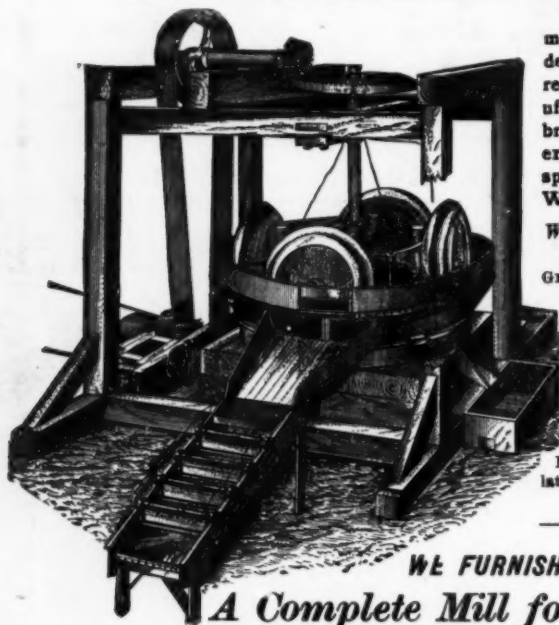
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Please accept congratulations for your success.

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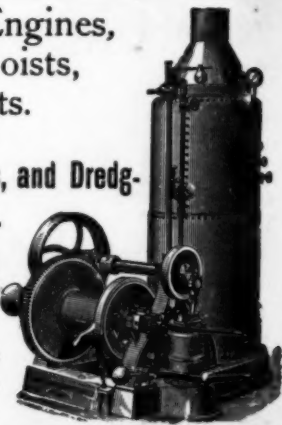
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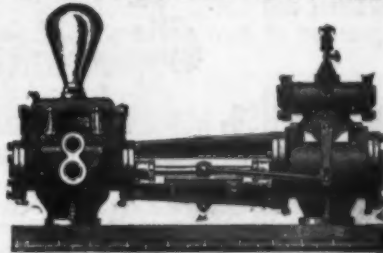
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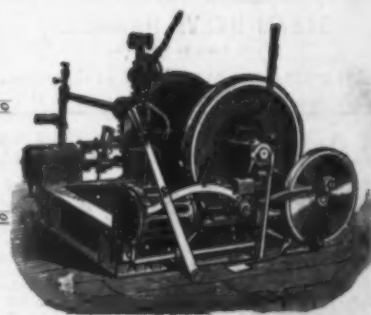
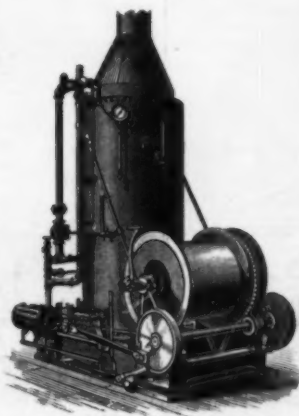
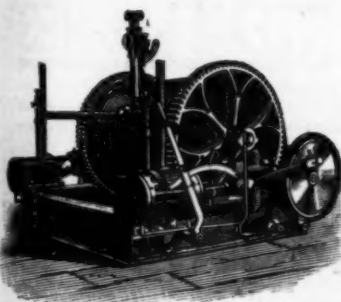
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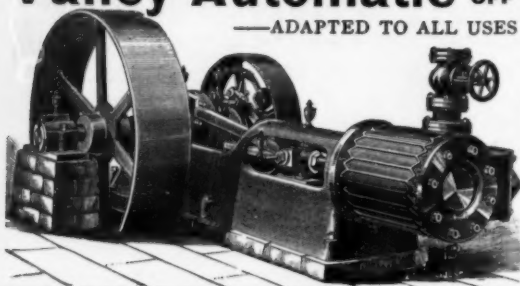
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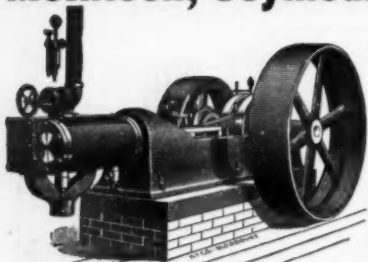


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Automatic Cut-off Engines

5 to 500 Horse Power.

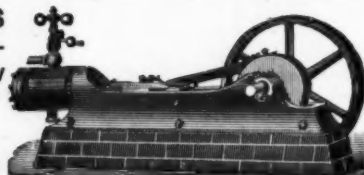
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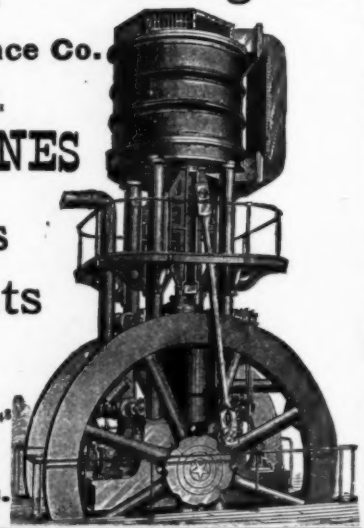
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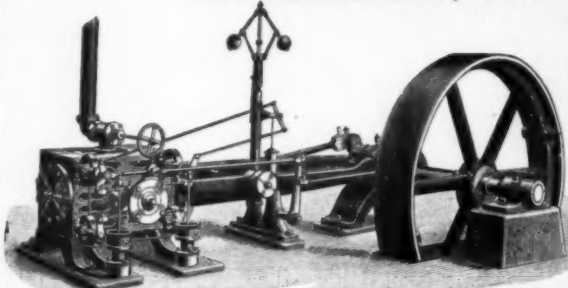
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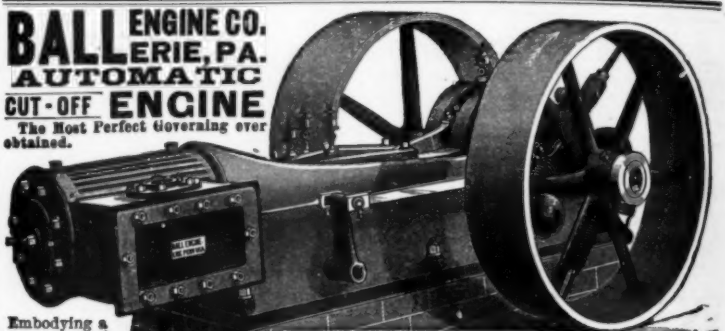
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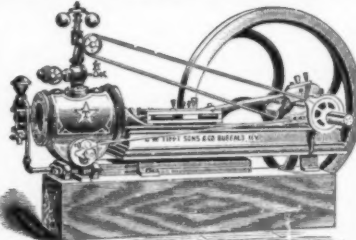
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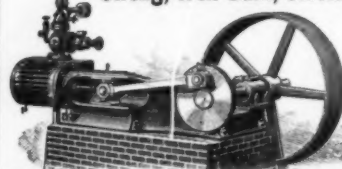
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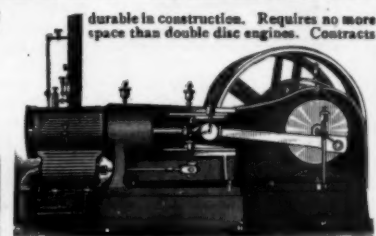
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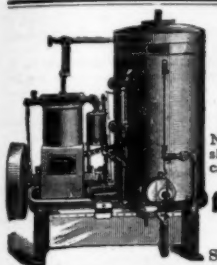
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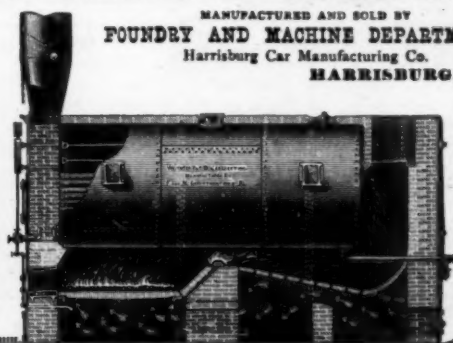
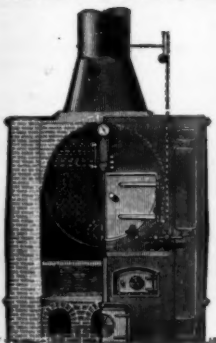
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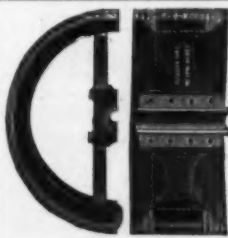
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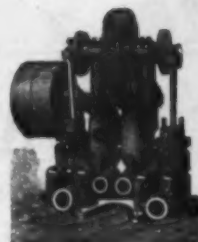
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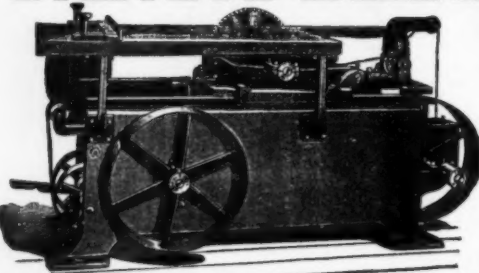


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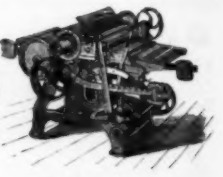
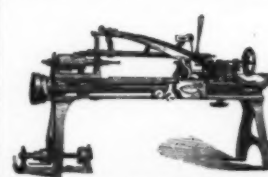
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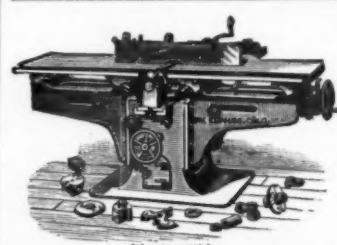
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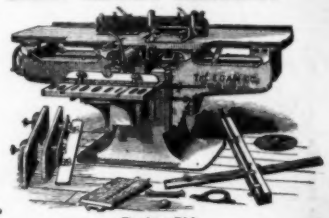


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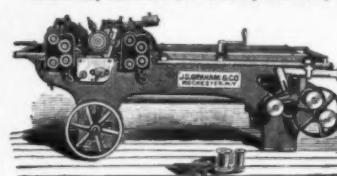


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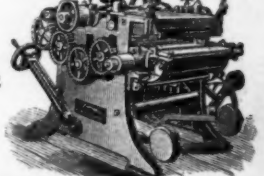
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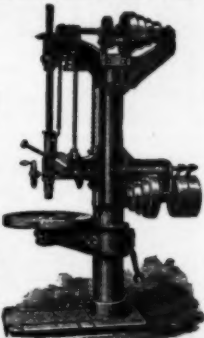
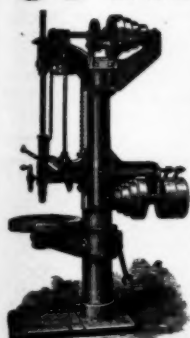
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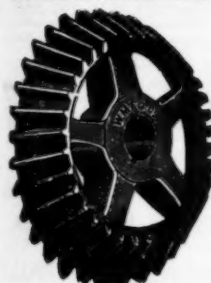
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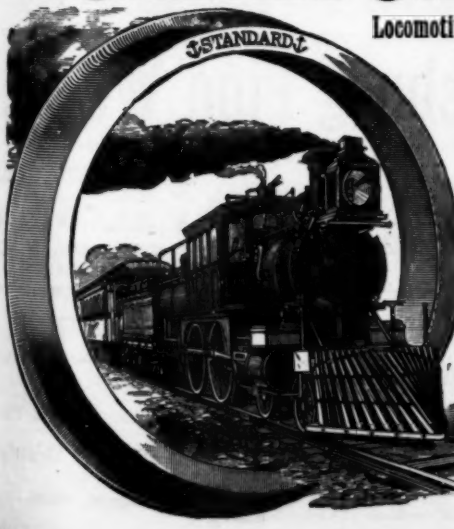
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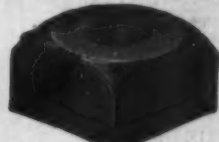
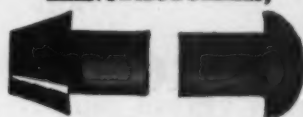
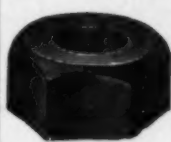
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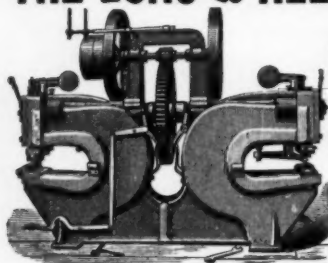
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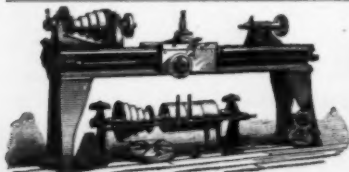
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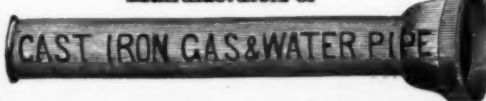
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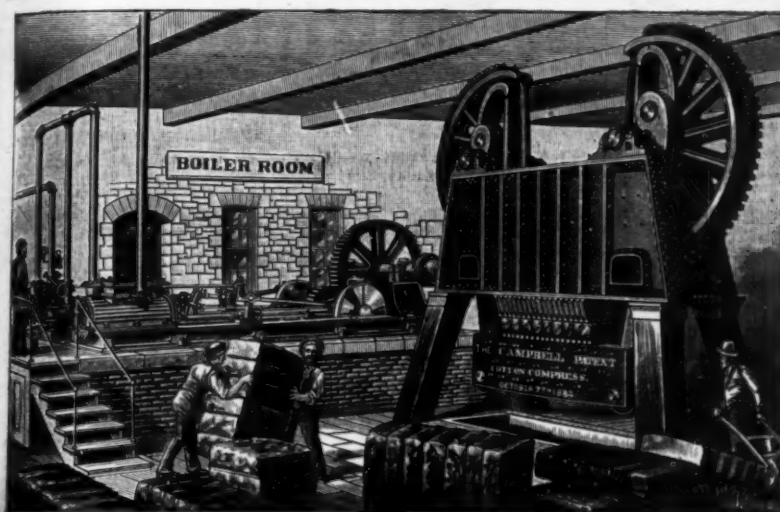


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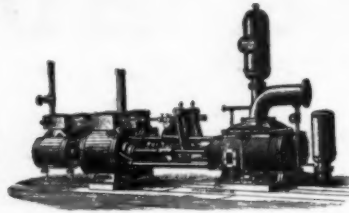
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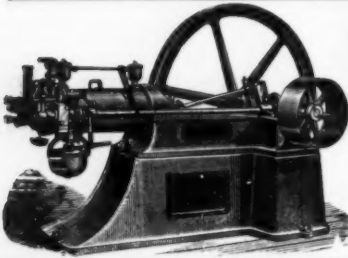
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Manufacturers' Record.

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R. H. EDMONDS, EDITOR.

—OFFICE—

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The MANUFACTURERS' RECORD solicits correspondence relating to the manufacturing, mining, lumbering and all other material interests of the Southern States. Letters on any phase of Southern development, facts as to the resources of this section, notes of new enterprises to be started, etc., etc., will all find a welcome. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested.

In 1887 the South made a larger corn crop than ever before. Fortunately as this would be under any circumstances, it was exceedingly fortunate in view of the extremely short crop in the West and the consequent high prices. The increase in the South's 1887 corn crop over that of 1886 will keep at least \$30,000,000 in that section that would otherwise have gone West. As the planting season returns it becomes of great importance that Southern farmers should be urged to plant more largely than ever of corn. Before another crop is raised the West will be almost bare of corn, and stocks will be at such a low point that an unusually heavy crop for the whole country would be so greatly needed to supply the deficiency of 1887 and to meet current wants that prices would still continue high, even if the yield be very large. It is very important, therefore, not only for the good of the South in general, but especially for the prosperity of the farmers that they should again raise a large corn crop. The South ought to do even better in this line than last year, and Southern farmers will make a serious mistake if they do not plant for a large crop of corn and also of oats. We believe that every paper in the South would do well to urge this matter upon its readers.

AFTER several months of negotiations the Tuscaloosa (Ala.) Coal, Iron & Land Co. have closed a contract, they write us, for the organization of a \$500,000 company to mine coal, make coke and establish a barge line for the shipment of coal and iron from Tuscaloosa to Mobile. The establishment of this enterprise must mark the most important event in the industrial history of Tuscaloosa, and its success will prove of vast benefit to the entire State.

Immigration to the South.

The responses to our last week's editorial, "Immigration to the South" have been numerous and gratifying. Some exchanges have republished it conspicuously, while others have commented upon it from their respective standpoints, but in no case have they contravened the position we assumed that "this work must be started, or, if not started, be generously and vigorously supported by the railroads." And just here we wish to say that the Seaboard Air Line system, of which Major J. M. Robinson, of this city, is president; Major J. C. Winder, of Raleigh, N. C., general manager, and Capt. F. W. Clark, of the same city, general passenger agent, has for several years offered inducements to settlers along its lines in the South that every other railroad corporation might advantageously adopt. This wise and enterprising corporation makes it a rule to give to all non residents of North Carolina who settle in that State, on or adjacent to any of the roads of its system, the following privileges during the first year of residence:

"All male heads of families will be transported over roads at a rate of one cent per mile for one year from the date of actual settlement, and the immediate members of their families (not including servants) will be furnished tickets at two cents per mile during said period. Also a reduction of one half from the regular rates of the road upon which the settler is located will be allowed by the agent, at their nearest station, on freight of whatsoever kind received by them during the first year of their residence, provided it be for their own use and not for sale or transfer to others."

We commend this plan to those railroad companies in all the States, who, falling back behind the interstate commission law and decision, claim that they can do nothing to aid immigration. There is no conflict between the law and the liberal policy adopted by the Seaboard Air Line, of which every county traversed by its series of roads enjoys the benefits.

Since writing the foregoing we have received a letter from the North Carolina Land and Immigration Bureau, in New York city, (a branch of the State Bureau of Immigration) in which, after thanking the MANUFACTURERS' RECORD for its editorial, Mr. McAllister, the New York commissioner, says: "We of this Bureau were glad to read your article, 'Immigration to the South.' It was exactly what is needed to quicken the people of every State, and to wake up the railroad companies. The sooner every Southern State, and every railroad traversing that section, fall into line with North Carolina and with the liberal policy of the Seaboard Air Line Railroad, the sooner will we see a tide of immigration to the South equal, if not surpassing that which annually flows westward. The South does not need laborers, but it does want and want very greatly first-class skilled mechanics, and those hard working, intelligent, thrifty farmers who know

how to save money besides making a good living by tilling 25 or 50 acres. The North Carolina Board of Agriculture, of which Governor Scales is the official head; Colonel Robinson, an experienced farmer, the executive officer, and Captain Patrick the commissioner of immigration, has given us instructions to seek none for settlers in that State except those who have the means necessary to support themselves and their families until they can establish themselves on farms or in some kind of congenial employment, in which they can make a living. In compliance with this clearly defined policy this Bureau has advised all applicants without means to remain at home, while it has presented the attractions of North Carolina to a multitude of those who would make desirable citizens. We have also established in London an agency that will bring us into connection with that large class of tenant farmers, who are possessed of more or less means, who see that British policy is ruining them, and are leaving that for more favored lands. It would facilitate the work of this bureau if every Southern State would establish in New York and in London similar agencies to ours, for the greater the competition the more would be the interest aroused, and every State participating in the work would mutually help and be helped. In New York there is a leather district, a dry goods district and a hardware district. Why? Because an aggregation of wholesale houses in any one branch of trade brings more customers to every separate establishment than would come if it occupied the field alone. The same rule would apply if the Southern States all manifested the same enterprise as North Carolina."

There is good, solid common sense in the foregoing. The example of North Carolina is well worth imitating, and here let the MANUFACTURERS' RECORD renew the suggestion made last fall at the time of the Piedmont Exposition. The resources of the South should be displayed in New York. The railroad companies and the localities that made that magnificent display should combine again, and exhibit where the thousands who do not journey South could see them. A great exposition of Southern natural resources opened in the Madison Square garden next May, and continued to next November, would do more for the South than can possibly be effected by 500 exhibitions held in its larger cities. The mountain must be taken to Mahomet. Who will take the lead in such a patriotic enterprise?

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

The Southern Cotton Industry.

The statistics given in the MANUFACTURERS' RECORD of Feb. 4, showing the wonderful development in cotton manufactures in the South, continue to attract great attention all over the country. In republishing our figures, the Daily Citizen, of Lowell, Mass., said:

"New England must look to its prestige. A quarter of a century ago, the South was its foe; to-day the South is its fair rival in a market hitherto monopolized by New England. For years the South was content to produce cotton, now she aspires to manufacture it; and there is no valid reason why she shouldn't. The war struck a blow which paralyzed her energy and crushed her ambition. That has all passed, and with it the prejudices engendered, and the traditional and enervating customs fostered by a dependent system. Labor is no longer a menial task; business has become the aim of existence. A new generation, fired with new ideas and untrammelled by memories of the distant past, look forward with an active hope to the future. They see in the natural resources of the South opportunities most tempting to enterprise; and as they have built the blast furnace to smelt their ore, so have they built the mill to spin the cotton which whitens their fields with its fibrous wealth.

There is much that is significant to the manufacturing towns of New England, in the review of the Southern cotton industry, published in the Baltimore MANUFACTURERS' RECORD. * *

The MANUFACTURERS' RECORD is very sanguine that when the people of the South become expert in the cotton industry, they will be able to compete and compete very successfully, with the mills of the North, in the manufacture of fine goods. It is reasonable to suppose that with all the facilities at hand, they will not remain content to confine their efforts to the coarser grades, as they are now doing. The erection of cotton mills is giving employment to hundreds of white women, who never before had an opportunity to earn anything, or to contribute to the wealth of the community. To work is no longer a disgrace, and as the Southern women are possessed of a highly nervous quality of energy, they become very active and intelligent operatives. * * The one difficulty to be overcome in the way of advancement is the lack of capital. This places the small manufacturers at the mercy of the selling agents in New York. * * It will be a long time before the South can expect to rival the products of the New England mills; but the time is coming, and then the question will arise, What will New England do? It is not a problem of this generation, however, so we can cordially congratulate the South, and wish it more abundant success. America united can rival the world, and if the mills of New England and the mills of the South can compel the markets of the earth to buy their cotton manufactured, rather than raw, why, let us so compel them."

THE Citizen has had occasion to express not only its admiration of, but, as a Southerner, its gratitude to the MANUFACTURERS' RECORD, of Baltimore. We do not agree with it in its tariff views, the MANUFACTURERS' RECORD, in our opinion, leaning too much to high protection, but we do appreciate greatly its efforts in behalf of Southern interests and Southern development. Every issue is devoted to Southern industrial enterprises, advantages and opportunities.—Asheville (N. C.) Citizen.

If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year or six months for \$1.50.

An Epicurean Exposition.

Last fall the good people living in the vicinity of Beaufort harbor, North Carolina, determined to have a fish, game and oyster fair, and they did. Although it was not advertised as it might have been, it attracted to that safe and beautiful seaport numerous people, who were surprised beyond measure to see the variety of salt water products which the "toilers of the sea" in that little known part of the Old North State displayed for their instruction. Three years before that newsy little daily of New Berne, the Journal, commenced advocating the holding of a similar exposition in that city. The proposition at the outset did not receive the local encouragement it deserved, but, nothing daunted, Editor Nunn kept it before the people, and now his long-desired enterprise has been taken up by the best business men of the city and vicinity, and next month, from the 12th to the 16th inclusive, there will be a fish, game and oyster exposition at New Berne that will "astonish the natives" and every one else who goes to see it. The MANUFACTURERS' RECORD congratulates New Berne and the Journal on the manner in which the people have taken hold of this new undertaking, for by their action they have demonstrated that their pretty old Swiss settlement is astir with the energies and ambitions that are the grand factors of the new life that is renovating the South. They not only propose to hold this exposition for the purpose of teaching the world the vast and unmeasured wealth of their coast waters, but also to call attention to the commercial advantages of their situation, and to its present and prospective importance as a great business center. Having determined to join the people of Wilmington and of the rich intermediate counties in building a line of railway parallel with the coast that shall unite the two cities, (a line advocated two years ago by our North Carolina correspondent, in the MANUFACTURERS' RECORD), they are seeking by legitimate means to attract the attention of capitalists and settlers to the rich lands and the vast forests of all that section. They have gone still farther; and by the unanimous vote of their joint committees have extended a cordial invitation to the survivors of the Burnside Expedition in the Northern States to visit them on the 14th of March, the day that New Berne surrendered to its assailants, and join with them in the celebration of this important industrial event on the anniversary of that former unhappy affair. The president of the committee having charge of this exposition is Mr. George Allen, a merchant and manufacturer of that city, who has from the beginning been foremost in all good work for the up-building of the city and of the regions round about. He was a private in one of the Confederate regiments that fought for the defence of

the city, and associated with him are both Confederate and Union soldiers, who have cordially united in this invitation.

The MANUFACTURERS' RECORD is greatly gratified to notice this movement, which is in harmony with the attitude and spirit that prevails in all the Southern States. That the exposition will be well worth visiting is beyond a doubt, for the North Carolina sounds and their affluents abound in food fishes, while the variety of shell fish is as great as can be found anywhere on the Atlantic Coast. At this season, also, wild fowl are at their best, and the display of aquatic birds will unquestionably be large and fine. The completion of the proposed railway will open up a country equal for trucking or general farming to any in the South, and rich in timber. It will also make accessible large areas of water property of superior quality for oyster gardens, and affording many very desirable sites for winter resorts. New-Berne deserves great credit for inaugurating this enterprise, which must eventuate in her enlarged prosperity.

Two weeks ago we published an exceedingly interesting discussion of the tariff question in its relation to the South by Mr. C. L. Edwards, of Ennis, Texas. Mr. Edwards, it will be remembered, expressed the belief that "the colonels and brigadiers have controlled the politics of this part of the country" for so long that it is about time "the ex-Confederate private," who "figured in the bullet department" took a hand in the matter. And then he proceeded to show the absolute value to the people of the South of a protective tariff. Another Texan, by adoption, gives, through the MANUFACTURERS' RECORD to day, his views upon the same subject. While he would come under Mr. Edwards' head of "the colonels and brigadiers" he also figured, as we happen to personally know, somewhat freely in the "bullet department," or rather we should say the bullets figured somewhat freely in him. Among the very first volunteers that reported for duty in the Confederate Army, he never left the field, except twice when seriously wounded, and then was back on duty when he could scarcely walk. He sees that the old-time doctrine of free trade is not what the South needs to day, and, like tens of thousands of others who "figured in the bullet department," he advocates that which, under the new order of things, is essential to Southern prosperity. "It does seem to me," he writes, "suicidal in the extreme for men of the South to cling to this old, effete, worn out idea of free trade, with the light of experience shining upon the past and the bright rays of hope illuminating the paths of the future."

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We have had occasions at different times to seriously differ with the MANUFACTURERS' RECORD as to the proper policy in the matter of protection. Economically, we believe it wrong, but it is doing more to bring the vast resources of the South to the attention of the world than any other journal published, and is ever active to combat the detrimental statements of certain journals which delight to designate the genuine boom in the South as 'air bubbles,' 'wild cat' schemes, etc. — News & Herald, Winnsboro, S. C.

If you could convince us that free trade would be better for the South than protection, we would work as vigorously for free trade as we now do for protection. It is because we are thoroughly convinced that protection will benefit the South, not a part of it nor a few industries only, but the whole South and every line of business and industry, that we favor it. We believe that it is just as essential to the prosperity of the farmers as to the prosperity of the manufacturers, because Southern farmers can never hope to become prosperous until they have a home market for everything which they can produce.

A WRITER in the Boston Post bewails the progress of the South, and says:

"With cotton grown on the spot, with cheap labor, with longer daylight, a milder climate and cheaper power, can you doubt their making cheaper goods than we can."

O, no! we don't doubt it in the least. In fact, it is just what the MANUFACTURERS' RECORD has been long claiming, but when you argue for free trade, on the ground that protection is enabling the South to compete with New England, we admit that you are giving the South a strong reason for favoring protection. You say:

"All these facts before long will attract attention, and we soon shall begin to see why England discarded protection, and we shall think, on the whole, that in our wide country, protection will be needed against our own people, and that the South will be running away with our own markets."

Well, New England has had the field for a good, long time, and now the South proposes to see what protection will do for her.

ONLY a few weeks ago the public was informed that the Charleston, S. C., cotton mill had failed because of the impossibility of securing operatives. The company had tried for years, it was said, to obtain adequate labor, and had finally failed because it could not do so. This report was telegraphed all over the country; and yet a new company, composed in part of some of the stockholders of the old concern, has been organized with a capital of \$250,000, and they have purchased this magnificent mill, which cost more than \$500,000, for one-half, or less than it cost to build and equip. Half a million dollars or more have been wiped out of existence. If the mill failed because no labor could be had, after several years of efforts, how is it that the labor supply has been so suddenly increased? For we are now told that there are good prospects for sufficient help. Will somebody please explain these contradictory explanations?

The Poor Not Growing Poorer.

The old cry that "the poor are growing poorer and the rich richer" was taken up recently by Mr. Andrew Carnegie in a speech in New York, in which he said: "This is not only not true, but it is the reverse of true. During the last fifty years in Britain the number receiving small incomes has increased eight times faster than the population, and during the past ten years the number of incomes between \$750 and \$2,500 has increased 22½ per cent. There has been no increase in incomes between \$250 and \$5,000, and there has been a decrease of nearly 2½ per cent. in the number of people receiving \$5,000 and over per annum. If the numbers receiving more than \$10,000 per annum were counted a far greater reduction in number would no doubt be found. These figures are taken from the income tax returns, and cannot be gainsaid. We have similar proof in this country. My friend, Mr. Atkinson, has shown that within the past twenty years wages in Massachusetts have risen 27½ per cent., and the purchasing power of these wages has increased 25 per cent., giving the wage receiving class equal to more than one half additional revenue. There never was a time in the world's history during which labor received so large a proportion of the joint product of capital and labor as at present. In a new country like this it was inevitable that the few sagacious men who laid hold of certain lands, ideas, of appliances, should make large fortunes; but these days are rapidly passing away and wealth is harder to acquire in large masses, and becoming more and more distributed. The New York Central Railroad is now owned by 12,000 shareholders. The part of the Pennsylvania Railroad between Pittsburgh and Philadelphia—only 374 miles—has more owners than all the men employed by it in every capacity. It belongs to 17,000 people, nearly one-third being women or estates belonging to women. It is substantially the same with the railway system. It is the same with banks, steel-rail mills, cotton mills, and all large manufacturing enterprises taken as a whole. It is as true as any statement, demonstrable by figures, that the poor are becoming richer, and the rich poorer, and this at a surprisingly rapid rate. We have only to allow present forces free play to see this movement accelerated. I speak in the presence of many millionaires and business men, who know that capital invested in active business has scarcely earned simple interest for years past, while labor has constantly increased its earnings. Democracy is doing more for the workingman than socialism or communism can ever do for him.

That the poor are growing poorer is one of the pillars upon which Mr. George builds his book. The other is that land is going into the hands of the few. The first statement is un-

Texas Tariff Talk.

Abolish Internal Revenue, Fortify
Our Seacoasts and Improve
Our Harbors.

R. H. EDMONDS, Esq.,
Editor Manufacturers' Record,
Baltimore, Md.

Dear Sir—You ask my views upon the questions pertaining to the public revenue now agitating the minds of the people and engaging the attention of Congress. It can avail but little what the views of so insignificant an individual as I am may be on any given subject, in so far as they may tend in themselves to influence the action of others, but when enforced by reason and arguments that commend them to the consideration of thoughtful men, the opinions of every man, however humble his sphere in life, may be useful to his fellows. Actuated by these feelings, and with no purpose of personal notoriety, I respond as briefly as the subject will admit to your invitation, hoping that some good, however slight, may be accomplished in bringing the minds of the people of our section of country to a correct solution of the great question of federal revenue, which has perplexed the minds of our lawmakers from the earliest days of the republic. The difficulty of our forefathers seemed to be how to raise enough revenue for the economical administration of the affairs of government without imposing too great burdens upon the people; while, on the other hand, so great has been the growth and prosperity of our country, our difficulty seems to be how to dispose of the large surplus now on hand, and so to regulate the revenue laws in the future as to merely meet the expenditures, and thus prevent a further accumulation of surplus money in the treasury at Washington. The first difficulty (the disposition of this surplus) is one, to my mind, of easy solution. Our country is large, with extensive sea coasts and numerous rivers and harbors, with great cities "upon the sea," and great cities away from the sea; on rivers affording no, or very inadequate, transportation for their resources of commerce to the seaboard, or to foreign countries for the purpose of exchange and barter. Let this great bugbear, then, the surplus millions in the treasury, be devoted to a judicious improvement of our harbors and water-courses generally, and the placing of our large seaboard cities in some sort of security from the attacks of some maritime power with whom we may, in the complication of international affairs, be come involved in war. Let our navy be put into something like a respectable condition; our docks and shipyards cleared of rubbish, and our mercantile marine protected and encouraged so that the carrying trade of America may be in American ships, flying the American colors, and not in foreign bottoms—to enrich other lands and other people at the expense of our own countrymen, and to the discredit of our enterprise and the contempt of our flag. Since we haven't the prescience to look into the future and foretell coming events, let us, at least, profit by the experience of the past, and while we are one great growing nation let us not forget that we were, but a quarter of a century ago, rent and torn by dissensions; and but for the odium of slavery, which attached itself to the cause of the South, her independence would have been recognized by nations of Europe, the blockade of her ports raised, ships and men placed at her disposal to make a common cause with her in the blockades and, perhaps, the destruction of the large cities of the North. To cement this band of union now, thank God, upon a firmer and surer basis, that of mutual respect and homogeneity of feeling and interest than ever before, let us bind

it together by rolls of steel, and cement it by frowning batteries at every port of entrance; and iron-clads in every harbor, whose familiar sight will give confidence to trade and fill the hearts of our seaboard cities with a sense of security. It is worse than folly to talk about giving this surplus back to the people in the form proposed by the Blair bill. That but awakens, and justly too, the cry of "dangerous usurpation of power," and is an insidious creeping on to the centralization of power, disguised in a most dangerous, because a captivating, form—the education of the people. It only awakens the little less dangerous fires of "states' rights," carried to the extreme which maddened passion and hot debate engender, but if let alone will smoulder and die in that genial confidence and love engendered by a close adherence to the powers granted under the constitution, and an equal care and concern for the ports and harbors and coast defenses of the entire country. Let the federal government take care of the commerce of the country, and protect its citizens at home and abroad, and the States will take care of the educational training of their children.

And now I come to the second branch of the subject, the more difficult problem, that of adjusting the revenue of the government to its necessary expenditures. Until a late period in our history this income was derived almost exclusively from excise or custom house duties, commonly known as the tariff. But during the so often deplored, but to my mind very necessary and useful struggle, the Confederate war (sometimes erroneously called the rebellion) it was found to be necessary for the government of the United States to resort to a system of direct taxation known as the internal revenue laws, a system always and in every country abominable and abhorrent in the extreme to the people, and in a free country among a free people naturally and educationally so. Even the custom or excise laws of old England (which by their protective influences and operation have made her one of the first manufacturing and maritime nations of the world) met with stern opposition in the early period of her prosperity, and every school boy has read with thrilling interest the encounters between the smugglers and the custom officers that stand out upon the pages of her history and give the incident and the scene of her romances. How much more repulsive, then, to the free-born American must be those abominable internal revenue laws, which clothe the officials to whom their execution is committed, with the power of "search and seizure" without "warrant issued in due process of law," which make of these thousands of officials bands of spies and informers so hateful and despicable in the sight of a free people which break down the safeguards that the spirit of the constitution and the laws throws around and hedges about the personal liberties of our people, which invades the sanctity of private dwellings and exposes the sacred privacies of the very bed chamber to the intrusive and prying eyes of a set of hireling miscreants. Strange then, passing strange, indeed, is it, that the Southerner, once so noted for exalted and chivalrous sentiments, should lend his influence to the perpetuation of such a political heterodoxy, such a shameful travesty upon the very spirit and genius of our free institutions! Apart from all this these laws operate especially hard upon the Southern States, struggling giant-like to recover from the exhaustive effects of a devastating war and to develop the vast resources of their fertile soil, to utilize the water powers of their numerous rivers rushing on to the sea, and to explore the wealth of their mineral hills. Relieve the tobacco crop from the internal tax of \$30,000,000 a year, and infinitely greater

benefits will accrue to the tobacco-growing States, than can by any possibility result to them from the doubtful and dangerous bonus contained in the Blair bill. Take away the \$65,000,000 internal revenue upon distilled liquors, at least \$30,000,000 of which is derived from alcohol used in mechanical, scientific and medicinal purposes, and the poor man will reap more benefits from the lessened costs of the medicines for his children, and the manufacturer, in the reduced price of the alcohol he uses in his business, than can be hoped for from the liberal donations of the Blair bill accompanied as they are, by an insidious and artful interference with the internal affairs of the States. The amount of revenue derived from this internal tax on tobacco and distilled spirits, about equals the annual surplus accumulations in the Treasury at Washington; and if this is taken off the tariff or custom duties might remain unmolested, or slightly modified, and the affairs of government be conducted on a basis that affords some slight aid to the struggling enterprises of the South; while the great whiskey rings would be deprived of the power of exacting untold wealth from the masses of the people, and the vast army of officials engaged in spying upon the people, would be relegated to the plow-handle or the pick. President Cleveland was peculiarly unfortunate in his suggestions on this subject, and if the Democratic party come up to his positions upon the subject of revenue, his chances for re-election will be slim, indeed; or woe will befall the industrial enterprises of the country, especially of the South, for the next four years. The party seems blinded to the teachings of history, by its devotion to a theoretical idea. The agitation of this free trade myth has, from its earliest inception, been productive of no good, but of great harm, for deleterious results have always followed a reduction of the tariff on home productions. If one will but take the time and pains to examine the subject and look to statistics, the figures and facts would more than sustain my assertion. These are too elaborate for this communication, and would draw it out to too great a length; but I will instance the sheep and wool interest in my own State as an example. Texas produced in 1866, 6,000,000 pounds of wool; in 1881, 26,000,000 pounds; in 1883, 28,000,000—showing an increase of 466 per cent., under the benign influences of the protection afforded by the tariff of 1867. In 1883 the "free trade" element asserted itself, and the tariff on wool was reduced; what the result has been, I have no figures at my command to show, but from my own personal observation, and my information from men who were largely engaged in that growing industry in this country, a tremendous blow was given it by this reduction. When the tariff was reduced in 1883, sheep were worth from \$4 to \$5 per head, and were in great demand; since then, the very same flocks have sold for from 50 cents to \$1.50 per head, and now there is no demand and the business is steadily declining. Other sections of country where this great industry was just budding into life, can doubtless tell a similarly sad tale of the blighting, blasting effects of the tariff of 1883. It is to be hoped an enlarged patriotism, sufficient to override the mere partisanship that usually governs Congress in the session devoted to "president making," will take hold of, and find a lodgment in the hearts of our law-makers, and that we may not have a recurrence of the legislation of 1883 upon the tariff reform, that will be followed by a train of like evils and disastrous consequences.

The most specious argument of the free-trader is, that protection tends to build up monopolies, and to enrich the few at the expense of the many. Both the propoitions contained in this assertion, I deny; but, even if it were so, would it not be bet-

landed and the second is no less so. Here is the truth open to all men. It is contained in the census—the only source of knowledge in this matter. It tells us that in 1850 the average size of farms was 203 acres; in 1860, 199 acres; in 1870, 153 acres, and in 1880 only 134 acres. This embraces the era of huge estates of thousands of acres which some capitalists purchased, believing that the law which forced manufacturers into large companies would obtain in the cultivation of the soil. They were altogether mistaken. These thousands of acres worked by capitalists with hired labor have been found unprofitable, just as large cattle companies have been found so. The small farmer cultivating 50 or 160 acres with his own hands and the help of his own family can beat the capitalist."

Capitalists Interested at Big
Stone Gap.

Big Stone Gap, the new industrial town of Virginia, seems to start out under very favorable auspices, at least, so far as having many great capitalists interested. The Age of that town says:

"Among the well-known railroad and mining capitalists interested in the town of Big Stone Gap may be mentioned: Exteine Norton, President L. & N. Railroad; John H. Inman, New York city; F. W. Haidenbauer, Washington, D. C.; A. H. Broason, New York city; E. B. Leisenring, Mauch Chunk, Pa.; John C. Ballitt, Philadelphia; Michael Thayer, Boston; F. D. Carley, Louisville; H. C. McDowell, Lexington, Ky.; H. W. Bates, vice-president Kentucky Southern Railroad; R. B. Whitride, Boston; James W. Fox, Jelico; H. B. Barton Myers, Norfolk; Hon. P. W. Hurdin, Frankfort, Kentucky; Charles T. Ballard, Louisville, Ky.; William D. Jones, Philadelphia; W. G. Sheep, Boston; J. B. Altermus, Philadelphia; F. A. Stratton, Chaitanooga. Among the corporations, whose members are interested, are: The Louisville & Nashville Railroad Co.; Norfolk & Western Railroad Co.; Kentucky Union Railroad Co.; Kentucky Southern Railroad Co.; Chicago, Cincinnati & Charleston Railroad Co.; South Atlantic Ohio Railroad Co.; Virginia, Tennessee & Carolina Steel & Iron Co.; Virginia Iron & Coal Co.; South Appalachian Land Co.; Southwest Virginia Mineral Land Co.; Pope, Payne & Co., of Boston; Clay, Jourdan & Co.; Inter-State Investment Co.; Altermus, Boston, McGee Trust Co.; Wise County Investment Co."

MR. HARRISON DUNHAM, 19 Congress. St., Boston, Mass., in a letter to the MANUFACTURERS' RECORD, says: "Our family have been upwards of 100 years at Boston in the manufacturing business, but of late years I have secured patents for a new class of cotton spun goods, by which cotton tarred rope, and harvest string or twine can be made to supersede imported hemp rope or twine. The vast trade in hemp harvest twine is now over 130,000 tons daily through each year, most of which goes West, and is paid for as delivered; say about 40,000 tons annually. Added to this is fully as much more imported hemp rope of all kinds going West. One cent per ton of the harvest twine is \$800,000. This is the foreign hemp trade is a new business, which cotton patent twine can compete with. Probably all the cotton mills now at the West do not use so much cotton as the harvest twine demands. But the manufacture, once begun, would soon bring out results equal to the need. It would take about one-tenth the capital; one-tenth the help; one-tenth the power of the ordinary cotton-cloth mill, with ten times the profit. A one or two-story building, with ample ground-room to extend, if needed; built of brick or wood would answer for the purpose, on which the lowest rates of insurance can be had."

ter to build up monopolies and enrich a few of our own people, than to enrich the people of other countries at the expense of our own, and to the decadence and ruin of the industrial enterprises of the land. The argument that protection benefits the rich man, and operates hardly upon the poor and the wage-worker, has no force with me and no foundation in truth. The owners and the wage workers, or operatives of the factories, have a unity and not a diversity of interest, and are mutually benefited by the protection, which a tariff on the article manufactured or the raw material of which the fabric is made. If by removing the tariff, you bring the home manufacturer or producer in competition with the foreign commodity or product, to make his goods and sell them at the price to which this competition reduces them, he must reduce the wages of his employees, or else, close his factory and send his employees adrift, to live as best they can. But, they say, it makes goods cheaper to the consumer. Yes, cheaper for awhile, until the foreign manufacturer has closed the doors of your own home factories, and sent thousands of employees out to starve or suffer all the hardships and privations of poverty, until some new field of labor is found, and then, no competition being in the way, they put up the prices of their commodities higher than ever before. But there is fallacy in the argument that prices are made lower to the consumer without corresponding benefits. Whenever an industry is fostered and is profitable men readily embark in it, and thus by home competition the market becomes glutted and the principle of supply and demand steps in and regulates and adjusts prices so that in a short space of time the little higher price we may have at first to pay for a home manufactured or grown article will soon be more than compensated by its great reduction in price, and all the time the country and its resources are being developed and employment given to thousands who else would have been idle, thriftless, homeless. We have a striking example of this in the Bessemer steel rails, for which in 1867 our railroad builders were forced to pay English foundries \$166 per ton. Now a better rail, manufactured in our own country, from our own rock ribbed hills and by the labor of the brawny arms of our own sons of toil, is sold for \$32 per ton, while great manufacturing interests have been built up, thousands of poor men given employment at remunerative wages, that to the poor, half-starved, half-clad European operative would seem fabulous. Another instance: some years ago, when it was discovered that the sugar beet produced an excellent article of sugar France laid an impost duty on other sugars that amounted almost to prohibition. The result was that sugar advanced in price in that country, but then every farmer went into the cultivation of the beet, until France became one great sugar beet farm, which has brought down the price of sugar there so low that if the duty is taken wholly off sugar in this country by the present Congress her importations of beet sugar will close up our sugar mills and bankrupt our sugar cane planters in two years; so that you see high prices may prevail for a time, but that begets competition and enterprise, and competition increases the supply until it becomes equal to or greater than the demand and then prices drop to a proper level, and no great harm is done to anyone, but lasting and permanent good to all by the general advancement and prosperity of the whole people. It must be conceded by every thinking man that the establishment of manufactures of any kind in any community increases the facilities for the wage-worker to obtain remunerative employment and enhances the value of farm products, because factories cannot be run without operatives, and every operative who finds employment, whether imported or taken from the farm, adds another to the great army of consumers, and by that much increases the demand and the price of farm products. It does seem to me suicidal in the extreme for men of the South to cling to this old, effete, worn out idea of free trade, with the light of experience shining upon the past, and the bright rays of hope illuminating the paths of the future, where even the blind may walk without stumbling.

The banner that has inscribed upon its folds a repeal of the internal revenue laws and a tariff for revenue sufficient to meet the expenditures of the government, with incidental protection to home products and manufactures, is that upon which the Southern Democracy should rally, and it will lead them to victory.

Yours truly, ELIAS EDMONDS.

Moving Southward.

Northwestern Lumbermen See the Inevitable—Buying Heavily of Southern Timber Lands.

The work of the MANUFACTURERS' RECORD in persistently year after year making known to the world the wonderful resources of the South is making itself felt in all parts of this great country, and other journals, even those of the North, are joining vigorously in this good work. The MANUFACTURERS' RECORD has labored unceasingly to attract attention to the wonderful timber wealth of the South, and now the lumber papers of the great Northwest are supplementing these efforts with a vigor that shows that they fully appreciate the magnitude of the South's timber supply, and see the rapid trend of industry Southward. Northern and Western capital is now pushing itself into Southern iron interests, Southern cotton manufactures, Southern lumber interests—three of the future greatest industries of the South—as well as into many other lines, and the tide of investment is rapidly swelling. The Timberman, of Chicago, says: "The infusion of Northern brains and capital into the various ramifications of the lumber business in the Southern States is resulting in a wonderful development of Southern timber resources; and this transfer of enterprise, tact and skill from the centers of lumber production—Wisconsin, Minnesota and Michigan—in connection with the financial strength incident thereto, is being almost silently, but sure and swiftly, accomplished, and so destined to become an important factor in the social, business and political revolution which is inevitable in the South under the rapidly changing conditions. As new blood infused into human veins resuscitates life and invigorates physical force and activity, so the infusion of new genius and enterprise into a country abounding in natural resources, as does the South, will thrill, awaken and resuscitate the dormant energies, and inspire and animate the people to become factors in demonstrating the possibilities of a country on which nature has been most lavish in her bestowments.

There is no one of nature's gifts at present, where both necessity and promised reward are so urgent, that is attracting with such magnetic force both brains and capital as is the timber which towers toward the skies in almost limitless abundance, and by the force of every warm, passing breeze, wafts it had as in mute appeal to the men of means, enterprise and determined purpose to 'come down and possess it.' And these silent appeals are not in vain, but are meeting a steadily increasing response; and hence Southern lumber is already becoming a not insignificant competitor, by any means, in the markets which were formerly tributary to the producing and distributing centers of Wisconsin, Minnesota, and even Michigan to a slight extent.

And while investments of Northern capital in the timber resources of the South have been quite extensive, the utilization of the investments have but fairly commenced; but as the first trickling of water that finds its way down the declivity from the fountain-head is a sure precursor of the coming avalanche, so will the pioneer movement, which has already been made from the North in the harvesting of the timber resources of the South, prove the harbinger of a mighty movement, which shall not only infuse activity in the lumber trade itself, but shall by its powerful impetus and importance induce other similar movements looking to the developments of other resources—coal, iron, agriculture—and the small ripple on the business surface of the South, largely inspired by lumbermen from the North, is destined to increase in size and velocity by the powerful

Northern enterprising breezes, until it results in a mighty wave of prosperity that shall roll over the entire country and spread its beneficent influence not only over the South, but the back current shall return laden with riches to bless the section from whence the movement emanated and received its original impulse. Great and magnificent are the resources of the South and their inherent possibilities, and great and grand is the enterprise of the lumbermen of the North and Northwest."

In discussing the same Southward march of Northwestern lumbermen, with their great capital, Lumber, another Chicago Journal, says: "It is said that the present winter will see more Northern money put into yellow pine in the South than any of its predecessors, though it is well known that for several years that region has offered superior attractions as a place for investing spare capital. Without making any great stir about it, timber buyers have been industriously employed searching out lands still open for purchase and having them estimated, these preliminaries usually resulting in the transfer of the tracts under negotiations from the government or from the earlier buyers to those who are acquiring them for a permanent holding. Capitalists, especially those who are familiar with the lumber trade, recognize the worth of Southern timber, and are making haste to secure it before it is too late to get in at the low figures that still rule. They know that yellow pine at fifteen, twenty or twenty-five cents a thousand must be good property, and they are willing to buy it, even if they have not gone so far as to form any definite idea of what it is likely to pay them. They look back upon the experiences of the last quarter-century in Michigan and Wisconsin, and rightly draw the conclusion therefrom that they can in a measure repeat the profits derived from the advance in white pine timber during that period.

If there are still those who remain skeptical of the possibilities that exist in the South for handsome profits on timber, the comparison herewith given will probably prove convincing evidence that such chances are there, and that they cannot too soon be seized. The figures were made by an experienced Northern operator, partly to satisfy himself that his position in respect to Southern pine was well taken, and partly for the purpose of convincing others interested with him of the correctness of his views. The cost of both timbers is computed on the basis of present value, with compound interest on that amount for the various periods indicated. This is assumed to represent the cost of carrying the property, the taxes being set off against the value of the land, which ought to, and doubtless will, more than cover this item in both cases. The future value—that is market value—of the timber as given in the tables, is necessarily purely a matter of estimate, but the idea has been to keep within bounds on both sides—not overrating the future value of the Southern wood, and giving white pine as much increase as its most sanguine friends will claim. The tables certainly make an interesting comparison.

Year.	Cost per M.	White Pine. Est. value.	Profit
1837.....	\$ 3.00	\$ 3.00	\$
1847.....	3.40	6.00	.60
1900.....	6.40	6.50	.50
1902.....	7.30	7.50	.30
1907.....	9.90	10.00	.10
1913.....	13.30	17.00	\$7.10

*1898.

Year.	Cost per M.	Yellow Pine. Est. value.	Profit
1837.....	.15	.15	\$
1847.....	.37	2.00	1.73
1900.....	.39	2.25	1.93
1902.....	.35	2.50	2.15
1907.....	.50	3.00	2.50
1913.....	.66	4.00	3.34

The point these figures bring out may be even more forcibly stated. For example, \$3 invested in yellow pine now, at the price above given, will buy 20,000 feet, the value of which twenty-five years hence will be, as estimated, \$30. From this must be deducted the cost and the expense of

carrying, which amounts to \$13.20, the difference or net profit being \$66.80. The same sum invested in white pine will buy only a single thousand feet, which at the expiration of the time named would show a net cost of \$13.20, and be worth at the liberal estimate made, \$12, showing a loss to the holder of \$1.20. The difference in favor of yellow pine is just \$68.

This calculation is of course open to the objection that it is merely "preliminary arithmetic," proverbially regarded with suspicion by every practical man. The doubter may want some assurance that yellow pine stumpage will go to \$4 within the next twenty-five years. He will find plenty of it in the history of the lumber business at the North since 1882. In that year stumpage well located on Saginaw waters in Michigan was readily purchasable at \$1.25 a thousand feet, and was not regarded at that price as an exceptional bargain. Plenty further West was to be had for much less money. It did not take twenty-five years for it to go to \$3 in localities where, that length of time ago, it was sold at government price. That history will repeat itself in this respect in the South admits of no question. Indeed, manufacturers in that quarter now are easily getting that stumpage out of the stuff they are cutting, and even more. One recent purchaser of pine in the South states that he can cut timber recently bought at not over twenty-five cents, and make it yield him a net return of \$4 for the stumpage."

Hydraulic Limestone.

TALLADEGA, ALA., Feb. 10, 1888.

Editor Manufacturers' Record:

The public are so deeply interested in the wonderful wealth of iron and coal now being brought to view over this portion of Alabama that other resources of industrial art are but little heeded, but right here in this county lies hidden other kinds of mineral deposits, which, if properly developed, would yield a very handsome return. I have reference now especially to a hill of hydraulic limestone, situated near the margin of the Coosa river in a Southwesterly direction from the city of Talladega.

It has been known to be hydraulic limestone for some 30 years, and by analysis is as follows:

Carbonate lime.....	49.95
Magnesia	38.59
Alumina.....	.31
Iron peroxide.....	.63
Silica.....	6.93
Water and gas.....	4.18

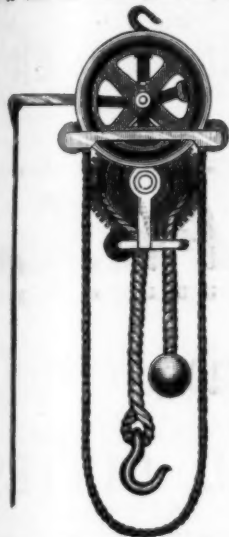
When pure limestone is burnt and reduced by the application of water the result is a mortar that will not harden in water, but crumbles easily, and limestone of this kind is used for ordinary building purposes. But when limestone contains other substances as clay or silica in the proportion of 8 or 10 per cent. of the limestone it produces what is called meagre lime, which has the useful property of setting or hardening under water, and for this reason is called hydraulic limestone. The presence of magnesia in proper proportions also gives hydraulic or water-hardening properties, and this stone contains more than one fourth per cent. of magnesia. Hydraulic limestone is not recognized by its external characters yet an expert can easily distinguish between common and hydraulic limestone.

This stone is also susceptible of a very high degree of polish, the grain being so exceedingly fine. It lies in the silurian or oldest fossiliferous formation where the principal iron ore deposits, beds of manganese, marble and hydraulic limestone occur. Much more could be said, and "then the half would not be told" of other deposits of valuable minerals, the rare and beautiful marbles rivaling the famous carrara in beauty and purity, and the porcelain clays that only need to be known to be utilized.

T. M. M.

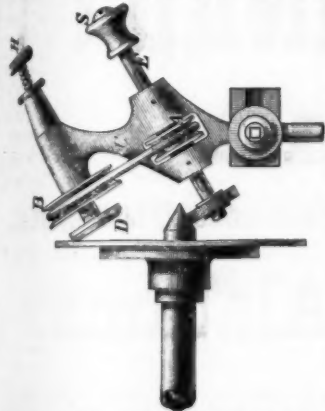
New Labor Saving Tools.

Devices that lighten labor and save money are always welcome in the world of trade and manufacture. The ingenuity displayed in those described in this article will commend them to the practical attention of the readers of the MANUFACTURERS' RECORD. This hoist is fitted with a swivel hook, by which it can be attached to any support.



PORTABLE ROPE HOISTING MACHINE

The machine simply consists of a frame between which are placed a pinion gear and binding yoke. The hand rope wheel, upon which the automatic brake acts to prevent any accidental lowering of the load, is placed outside the frame. The binding yoke, which is placed above the pulling wheel, binds the rope into the sprockets of the latter and prevents its raising, which would cause the slipping of the rope, and also does away



FRICTION DRIVEN CENTER GRINDER.

with the use of a drum for rope to wind around. At the bottom of the frame is placed a shive wheel, which is to make the load pull in line with hook placed at the top of the frame. The hoist cannot lower except when the brake rope is pulled upon. The automatic brake, which is used on this hoist, will hold a load at any point, and will allow operator to lower quickly or slowly by simply pulling on the brake rope.



DRILL GUIDE AND STEADY REST.

The need of a light, quick lift and lowering portable hoist for use in various places where one man only can be spared to handle 350 to 2,000 pounds has long been felt. This invention will meet the want. Rope weighs less than chain to lift the same weight, therefore the machine can be made lighter and cheaper.

The grinder shown above was designed

to be easily attached to any lathe, so that the lathe hand need not wait for his centers to be annealed or hardened. It will true centers up quicker than they can be annealed, turned and hardened. It is not used only to true up centers after they are turned, but to grind them up if cut or broken.

The hub of the shive pulley B runs in the frame C. The friction wheel shaft D slides in and out of shive wheel hub B. The shive wheel A is fastened to a sleeve, which slides the emery wheel spindle E. The emery wheel is moved in and out by the knob S, which is made a running fit, so that it does not revolve with emery wheel spindle. The sleeve and shafts are made of steel, and the frame of malleable iron. The face of friction wheel is covered with raw hide.

The inconvenience and delay attending the turning up of a lathe center, and the almost impossibility of getting an absolutely true center by the ordinary means at the command of the lathe man, not to mention the necessity for all work and imperatively fine work to be absolutely true centered, has led to the design of the drill guide shown in the cut, with which an absolutely true center, it is said can be obtained, even to the thousandth part of an inch.

The temper of the center need not be drawn to be trued up with this tool. Often a center is sprung or cut by the work or some other cause, or some accident occurs to make the center even a trifle untrue, and too often such a center is used in the untrue condition rather than to take the time and trouble to correct it.

With this simple tool in the shop this would all be obviated. It is slipped into the tool-post in place of the turning tool in a moment, and in a moment more suffices to adjust it to the face-plate and determine the angle by moving the wheel along the center.

The tool consists of a series of plates, D, which have the different sizes of holes drilled in them. These plates are fastened to a shank, A, by a bolt passing through the center of plate D and end of the shank A, and are held in proper position by the catch B springing into the pin holes E.

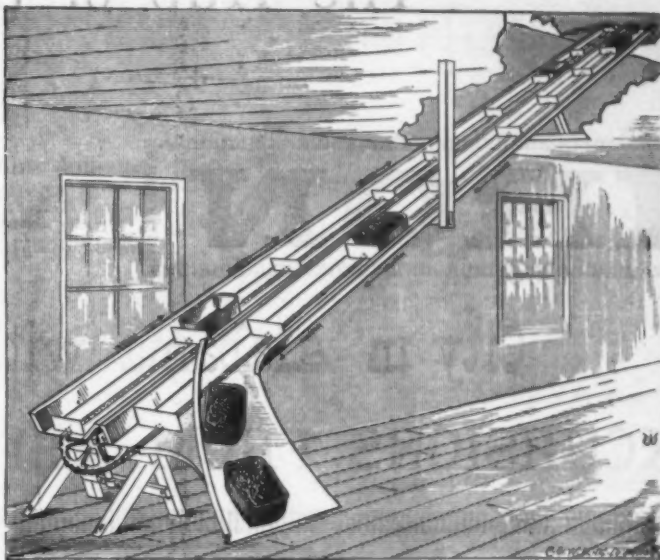
After the tool is set to drill any particular size hole any plate can be attached to the shank and any other size hole will come central with the size first set to.

In starting a drill it is only necessary to put the drill point through the proper hole in plate after it is set and the drill will find the center of work, and cannot move from it after started.

These tools are manufactured by the Energy Manufacturing Co., 1115 South 15th street, Philadelphia, Pa.

Double Service Package Conveyors.

The accompanying cut shows one of the many uses to which the Ewart Detachable Link Belting may be put for the handling of packages of any description. This conveyor may be run on an incline, as shown, or horizontally, and is especially adapted for carrying up baskets, boxes, trays, or hods.



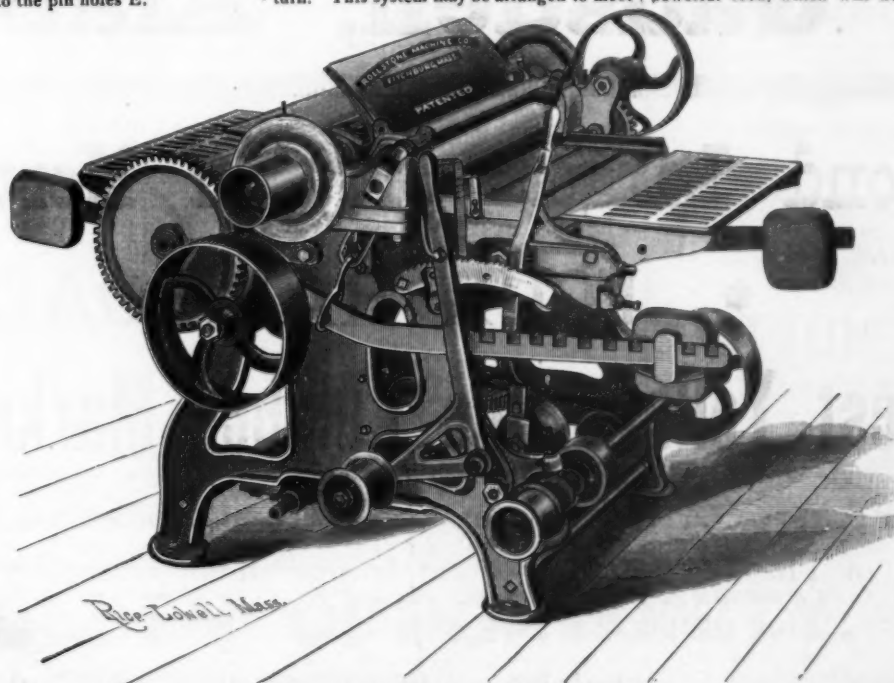
DOUBLE SERVICE PACKAGE CONVEYORS.

which are either to be loaded or unloaded and returned. The operation is continuous, and requires small expenditure of power. The direction of this conveyor may also be changed at any point desired; for instance, in a box factory, where it is necessary to carry the boxes or component parts from points all along the second floor, to either the first or third, the conveyor would be run all along that floor, and then at the proper point run up or down to whichever floor desired by means of small idlers placed at the turn. This system may be arranged to meet

Improved Rotary Bed Single Surfer.

The cut shown in connection with this article illustrates a new surfacing machine, manufactured by the Rollstone Machine Co., of Fitchburg, Mass., who say "these machines are made from entirely new patterns and embody all the latest desirable improvements, among which we mention: double

Balance-wheel driving pulleys on the cutter head; cutter head and journals made of steel, forged together in one piece, and finished with journals 1 1/2 inch diameter, which run in self-oiling boxes, a 'justable for dressing from 1/4 to 7/8 inches in thickness, by means of a new patent frictional adjuster, which works entirely by power, and is quick, accurate, reliable simple and durable; double pressure rolls, front and back rolls weighted, and entering rolls geared, which, together with the revolving lag bed, makes a very powerful feed, which will not fail on wet,



IMPROVED ROTARY BED SINGLE SURFER.

almost any requirements. Those contemplating or wishing to save labor in their manufacturing, by handling their goods by machinery at a small cost, can secure from Messrs. Burr & Dodge, of 39 S. Holliday street, Baltimore, Md., full information on the subject of elevating and conveying machinery.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$3.00 a year.

pitchy or icy lumber; improved close-jointed, extra-heavy revolving bed, running over steel ways. These machines are very heavy, and very nicely made from the best of stock, and all the journal boxes are lined with genuine "Babbitt metal," of our own make, and warranted pure. They are adapted to the work of shipyards, car shops, lumber mills, cabinet and furniture shops and all kinds of light and heavy surfacing where nice, smooth and rapid work is required. Capacity from 3,000 to 4,000 feet per hour." The reputation of this company is very high and their work well known,

GADSDEN, ALA.

"The Hub of the Mineral Belt."

— ONLY —

IRON AND COAL

City in Alabama with River Transportation.

EXCURSIONS FROM ALL THE PRINCIPAL CITIES.

Sale February 28th and 29th, 1888.

LAND • SALE • EXTRAORDINARY!

Gadsden, Alabama.

Second Largest City of North Alabama.

• FOUR RAILROADS. •

Largest Yellow Pine Lumber Market in the State.

STEAM COAL \$1 per ton. PIG IRON produced for \$9 per ton. Stock of The Gadsden Land and Improvement Company taken in payment for property at \$25 per share. Write to your railroad agent for rates. For further information address

M. L. FOSTER, Secy. & Treas.

The Gadsden Land & Improvement Company,
GADSDEN, ALABAMA.

Tuskaloosa, Ala.

* ALABAMA'S NATURAL PITTSBURGH. *

A Railroad and River Town of 6,000 Inhabitants, in the Coal, Iron and Timber District.

DIPLOMAS FOR

The Best Furnace Coke and the Best Blacksmith Coal

Were awarded this city over all and many competitors at the great Piedmont Exposition.

HEALTHFUL LOCATION. SALUBRIOUS CLIMATE. SCHOOL FACILITIES UNEQUALED BY ANY OTHER TOWN IN THE SOUTH.

"EXAMINE THE MAP."

* SITUATED ON *

Queen & Crescent

TRUNK LINE,

IN THE
Warrior Coal Field

AND ON THE

WARRIOR RIVER.

Only Navigable River touching the

Alabama Mineral Field.

Eight Months Navigation. Being Surveyed
now to be opened all the year round.

All Water Navigation to

* **MOBILE** *

AND THE

Entire Gulf and Atlantic Coasts.

THE

Tuskaloosa Northern Railroad

Is now under construction into the

MINERAL and TIMBER FIELDS.

THE

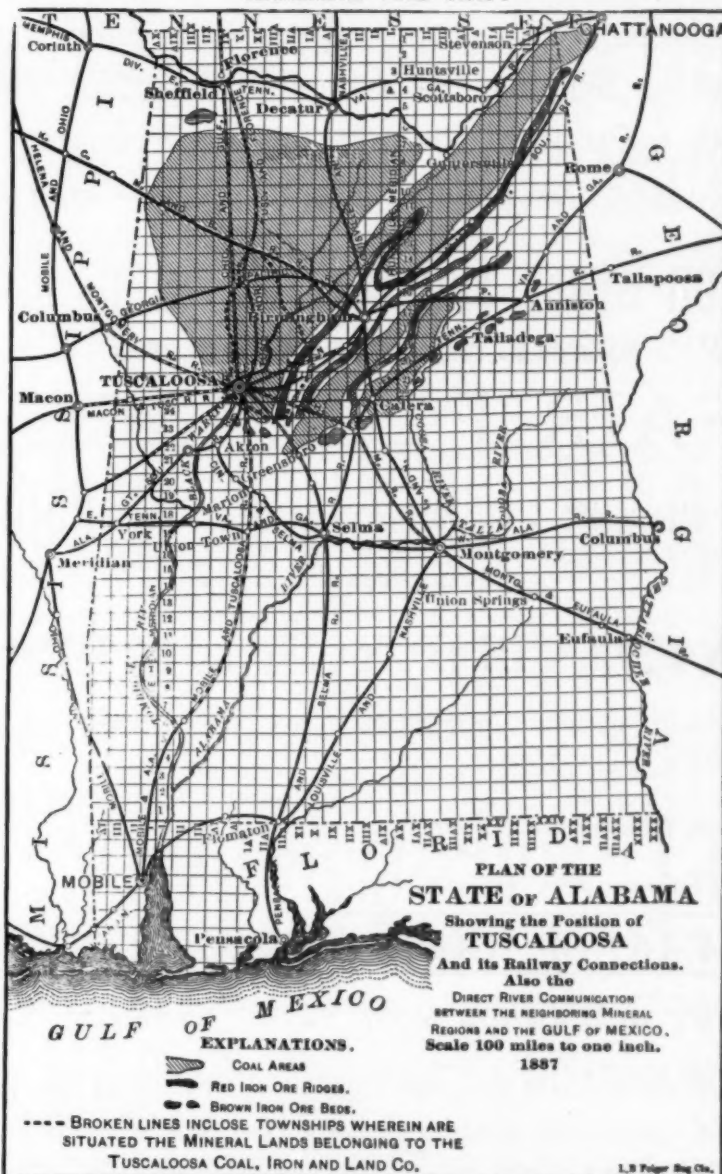
Macon & Tuskaloosa Railroad

Will soon be building into the

COTTON REGION OF MISSISSIPPI.

Fine Farming Region

Around and Below the City.



Superior Inducements

AND

* ADVANTAGES *

TO ALL

Manufactories Consuming

**WOOD,
IRON,
COTTON.**

FINE COKING COAL

In workable veins near city, fully tested.

◀ The Fire Clay ▶

Existing in inexhaustible quantities, has been
practically tested and pronounced

The Best yet Discovered in the South.

Street Car and Dummy Lines

NOW BUILDING.

◀ Water Works and Electric Lights ▶

TO BE PUT IN AT ONCE.

COTTON MILL

In Successful Operation.

ALSO

LARGE BRICK WORKS

COTTON-SEED OIL MILL, &c.

Manufacturers Seeking Locations in the South have here

THE GOLDEN OPPORTUNITY.

Many have availed themselves of it, but such is the wonderful richness of the resources of this section that there is

ROOM FOR ALL

THE Tuskaloosa Coal, Iron & Land Co.,

Owning 4,600 acres of city and suburban property, and 40,000 acres of mineral and timber lands, offers liberal inducements to manufacturers
to locate at Tuskaloosa, Nature's City, and invites correspondence and the fullest investigation of its claims.

An illustrated descriptive pamphlet sent free upon application to

W. C. JEMISON, President Tuskaloosa Coal, Iron & Land Co., **TUSKALOOSA, ALA.**

FLORENCE, ALA.

County Seat of Lauderdale County.

At Head of Navigation on Tennessee River, and at Foot of Muscle Shoals Canal,
which will be open Jan. 1st, 1888.

SITUATED on a gently undulating Plateau, 200 feet above high-water mark, surrounded by three large creeks of pure free-stone water. It has a Court House, Two Colleges, Four Public Schools, Six Churches, beautiful wide streets, graded and graveled, and shaded with forest trees; Hotels, fine store houses, Masonic, Odd Fellows, K. of H. and L. of H. lodges. A population of 2,500—moral, social and hospitable.

— The Scenery on Every Side is Picturesque and Beautiful. —

SO MUCH SO THAT IT IS CALLED BY VISITORS

— FAIR FLORENCE. —

There is no Place on the Continent more Healthful and Salubrious.

MANUFACTURES.

Within the last six months numerous manufactures have been located here, among the number:

Five Large Blast Furnaces.
One Rolling Mill,
Three Planing Mills,

One Saw Mill,
One Flour Mill,
One Wooden-Ware Factory.

One Cotton Mill,
One Cotton Compress and Ice
Factory.

Two Brick Machines and
Three Hand-Brick Yards.

There are VAST BEDS OF IRON ORE within a few miles North and
IMMENSE COAL FIELDS SOUTH

ACCESSIBLE BY RAILROADS NOW BEING RAPIDLY CONSTRUCTED.

By the 1st of January the Nashville & Florence Railroad will be completed, making three lines of railroad, and the river, thus opening up VAST AREAS OF TIMBER, IRON ORE, COAL, Marble, Limestone, Kaolin, Fire-Clay, and almost every kind of mineral and product.

THE LANDS IN THE SURROUNDING COUNTRY ARE FERTILE AND PRODUCTIVE.

All kinds of Grain, Grasses and Fruits grow to perfection. Springs and Water Courses are numerous, and grazing for Cattle is abundant for eight months of the year.

Pamphlets and maps furnished on application to

Florence Land, Mining & Manufacturing Company.

SHEFFIELD

◆ COLBERT COUNTY, ALA. ◆

The Iron Manufacturing Center of the South.

BEING at the *head of navigation*, and on the *south bank* of the Tennessee river, Sheffield is the *natural outlet* for the mineral and manufacturing products of Alabama and neighboring States seeking a water route to points on the Ohio and Mississippi rivers, and to the Gulf of Mexico, as well as the best *distributing point* over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. *Four railroads* certain, and several others assured. *Principal shops of Memphis & Charleston Railroad* will be erected here pursuant to written contract. These will employ between *four hundred and five hundred mechanics*, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here.

◆ Five Blast Furnaces Now Under Construction, ◆

Of which one is nearly finished, and the remaining four contracted to completion next spring, have estimated capacity of 700 tons pig iron per day. This is 40 per cent. more than now manufactured at Birmingham, Alabama. Experts do not hesitate to say that *iron can be manufactured more cheaply* at Sheffield than at Birmingham, and its *river transportation facilities* will enable Sheffield iron to reach the principal markets at a saving of from

\$2.00 TO \$2.50 PER TON.

A first-class semi-weekly newspaper, printed by steam, is regularly issued. Furniture Factory, Bottling Works, Bakery, 3 Steam Brick Works, 2 Hand Brick Works, 2 Steam Wood-Working Establishments, Water Works, 2 Banks, a Savings Bank, and Steam Job Printing Office already in successful operation, and Iron Pipe Works, 15-ton Ice Machine and five story hotel, with all modern appliances, will be erected. The Cleveland Hotel, Park House and numerous boarding houses furnish accommodations to travelers. Postoffice, Telegraph Office and Express Office already established. Contracts have been made for the early erection of Electric Light Works, Paint Works, Agricultural Implement and Machine Works and Cotton Compress. Large Stove Works, Machine Shops, additional Iron Blast Furnaces, an extensive Charcoal and Chemical Plant, a large Rolling Mill and other manufacturing establishments under consideration, and will probably be built shortly.

Good Water. Free Public Schools and Churches. Health and Climate Unsurpassed.

Drainage excellent. Splendid opening for men of *push and energy*. No "Old Foggy" element here.

No better point for *profitable investment*.

Sites for Manufacturing Enterprises,

And for Free Public Schools and Churches

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; now, (August 21st, 1887,) by actual count, 2,583. Increase of population, 300 per cent. in eight months, and only limited by accommodations.

Three years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three-story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants.

LIMESTONE of excellent quality for *fluxing iron* in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of *brown hematite iron ore* within twenty miles, along the lines of two Sheffield railroads. The Sheffield & Birmingham Railroad runs through the heart of the *Warrior Coal Fields*, which abound in first-class *coking, steam, gas and grate coal*. Timber is abundant and cheap.

The *Memphis & Charleston Railroad* and the *Sheffield & Birmingham Railroad* are now in operation into Sheffield. The *Louisville & Nashville Railroad Co.* is now extending its *Nashville, Florence and Sheffield* division, which will be completed to Sheffield before the close of the year 1887. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the *best combined river and railroad transportation center* in the South.

Every merchant and every established manufacturing enterprise is doing a profitable business. *More are needed.* For further information address

ALFRED H. MOSES, Vice-Prest. and Manager

Sheffield Land, Iron & Coal Co., - Sheffield, Ala.

Anniston

THE CENTER OF
Iron and Cotton Industry
AND MINERAL WEALTH.

"The Model City of the South."

IT IS

The Profits of Labor only that can add to the wealth and prosperity of a nation or community. It is this only that can make business successful and profitable, sustain and add to the value of real estate.

WHERE

Nature's resources are greatest, where nature's capital in rich agricultural lands, and where iron, coal and other useful minerals are most abundant, most accessible and of superior quality for all purposes, there will capital find its safest investment, largest returns and labor reap its richest reward. It is to the Anniston District where the best professional mining engineers and experts of the United States declare the great center of the iron industry of the South will drift, where its manufacture will be most permanent and profitable, and where ores in the greatest abundance and accessibility exist, and where they will be most easily mined, that this applies.



CAR WHEEL WORKS OF NOBLE BROS. & CO.

The Development of the Past Fifteen Years

Confirms all this, and every year convinces the experts of the correctness of their judgment. It is no longer opinion based on scientific and practical education; it is a fact that is clearly and successfully demonstrated, so that the visitor to the Anniston District can see at every step. The four iron furnaces that have been so long and successfully operated, and the new plant now being erected, and rapidly approaching completion, which will be capable of producing one hundred thousand tons of pig iron a year, demonstrate that

NOWHERE IN THE SOUTH

Has the iron industry been so profitable and so successful, or been established on so permanent a basis, and of no district is this so universally conceded by all, while nowhere else have arrangements been perfected and already established on so complete a scale to work the crude iron into higher branches of manufacture to increase its value, and to bring into the district the profits of skilled labor. THE GREAT CAR WHEEL WORKS OF NOBLE BROS. & CO., their rolling mill and steam forge and machine shops, and the Alabama Car Works, have been absorbed by the

UNITED STATES ROLLING STOCK COMPANY,

With a capital of \$4,000,000, for the purpose of adding to and enlarging the entire plant to build TWENTY CARS A DAY. Everything that goes into the creation of a car, except the tin for the roof and the wire nails, will be created from Anniston's crude material by her labor and skill. Fifty tons of wheel iron will be made into car wheels daily, twenty tons into car axles, fifty tons of pig iron into car and other castings, and fifty tons into bar iron and bolts, making nearly ten thousand dollars per day added to the wealth of the country by profitable labor converting nature's capital to the use of man. This company have a capital of \$4,000,000, and their Anniston works will represent a cash outlay of \$1,000,000. One thousand skilled mechanics will be employed as soon as the great enlargements under way can be completed.

THE STEEL BLOOMARY

Consumes and increases the value of twenty tons of pig iron per day, while the Pipe Foundry converts to the use of man TWO HUNDRED TONS OF PIG IRON PER DAY in one of the largest and best planned and most convenient labor-saving works on this continent. The Foundry of Murray & Stevenson, Engine and Machine Works of Pinder & Co., and Boiler and Sheet Iron Works of J. & D. Noble, all add to the consumption of crude material by the creation of finished work.

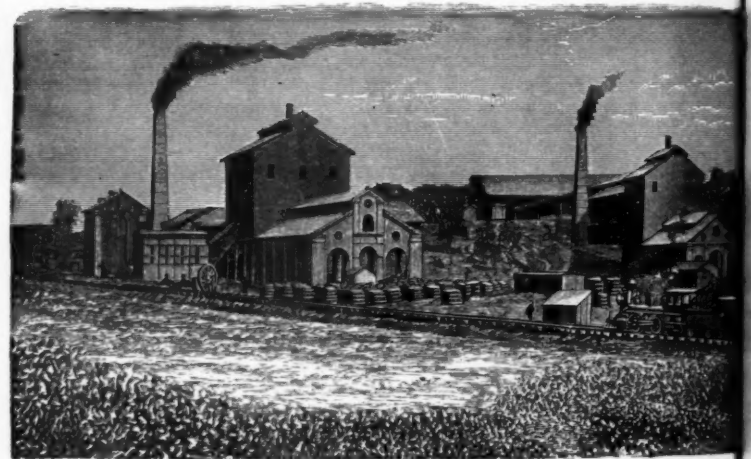
NOR IS IT TO IRON ALONE

That Anniston relies for increase of wealth and population. The Cotton Factory, with eleven thousand seven hundred spindles and three hundred and seventy-five looms, employing over three hundred and fifty operatives, adds greater value to the products of agriculture by converting six thousand bales of cotton into cotton cloth. The immense ninety-inch Morse Cotton Compress, with its brick warehouses, is fast making Anniston a cotton market and commercial center, and aiding its wholesale and retail merchants to extend and hold the trade of the country tributary to Anniston that its system of railroads has opened to them. The Georgia Pacific, the East Tennessee, Virginia & Georgia Railroad systems,

Give Direct Communication and Through Rates

To all parts of the country, while the Anniston & Atlantic Railroad, built by Anniston capital to open up new agricultural and mineral resources, gives Anniston, by connection with the Central of Georgia system, communication with the Atlantic sea coast and the new Anniston & Cincinnati Railroad, built and owned by Anniston citizens, opens up new resources and connections, and a shorter line with the great Northwest.

The proposed extension of the Anniston & Atlantic Railroad to Blocton will give another and shorter line to the great Cahaba Mines, producing the very best coal for domestic and manufacturing purposes in the South. Forty thousand acres of these coal lands, upon which a million and a half dollars have been lately spent in opening new mines and building several hundred coke ovens, ALL OWNED AND CONTROLLED BY ANNISTON CAPITAL, and developed to mine and manufacture three thousand tons of coal and coke per day, secures to Anniston for generations to come a full and certain supply of cheap fuel for all her industries, operated where a rich agricultural country can feed a manufacturing and commercial people, and where the



WOODSTOCK FURNACES—ANNISTON.

Best, Healthiest and Most Invigorating Climate in the World,

With mountain air and pure water, and an elevation of nine hundred feet above tide water, insures the health and comfort of the workman and his family; where health and comfort stimulate and lighten labor, and secure to it and its industries the reward due to both. It is these advantages which have been given by nature that enabled Anniston's citizens to create her past and present prosperity, and which secure her future. It is that they may participate in and avail themselves of these advantages that Anniston invites NEW CAPITAL AND TALENT AND ENERGY from all sections. We invite all to come and see, and on the spot to judge for themselves of Anniston's great resources and possibilities. The comfort and quiet of the famous Anniston Inn will make a visit to our city a treat and pleasure. Any information, attention and courtesy will be given and shown by addressing or applying to the

ANNISTON CITY LAND CO., Anniston, Ala.

CONSTRUCTION DEPARTMENT

PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Anniston—Street Railroad.—The Anniston & Oxford Street Railroad Co. have asked for permit to build into the city with a view to putting on dummy engines.

Anniston—Building.—W. C. King has contracted to erect a two-story brick building on Noble street for Joseph Eros, of Orangeburg, S. C. The cost will be \$6,500.

Anniston—Buildings.—L. N. Kaplin will erect two brick buildings, to cost from \$10,000 to \$15,000.

Anniston—Bloomery.—Morrison Bros. & Co. reported last week as to enlarge their bloomery, will increase their capital stock.

Anniston—Houses.—It is reported that Mr. O'Neil, of Birmingham, will probably build two two-story houses.

Anniston—Building.—C. Cofield, of Choccolocco, will erect a three-story brick building on Tenth street, to cost about \$15,000.

Ashville—Railroad.—A dummy railroad from Ashville to Whitney, three miles, is projected.

Avondale—Ice Factory.—The Avondale Ice Co. have ordered machinery to enlarge their factory, previously reported.

Bessemer—Mining.—H. F. De Bardeleben, of Bessemer; A. M. Adger, Birmingham, and Moses Loper, Robert Adger, A. T. Smith and David Roberts, of Charleston, S. C., have incorporated the Magnetic Ore Co., capital stock \$150,000, to mine iron ore and coal, and manufacture coke, iron, steel, &c.

Bessemer—Pipe Works.—It is rumored that pipe works are to be built. James H. Hard can give information if true.

Bessemer—Rolling Mill.—The Bessemer Rolling Mill Co. will, it is reported, increase their capital stock.

Birmingham—Temple.—The Masons contemplate building a temple.

Birmingham—Rolling Mill.—The Alabama Rolling Mill Co. will hold a meeting March 1 to issue \$50,000 of bonds to put in special machinery for manufacturing cotton ties, light hoops, b'nds, &c. They contemplate adding a plate and sheet mill during the summer.

Birmingham—Coal Mine.—B. F. Grace, Jr., will develop a coal mine.

Birmingham—Bank.—The People's Savings Bank will erect a three-story brick building on Third avenue.

Birmingham—Church.—The Methodists contemplate building a church where St. John's Church now is.

Birmingham—Jewelry.—George S. Obeir, Jr., W. B. Copeland and George S. Obeir have incorporated the Obeir Jewelry Co., capital stock \$25,000, to manufacture and sell jewelry, &c.

Brewton—Timber Lands.—E. F. Porter has purchased 60,000 acres of timber lands, and will soon begin developing part of the tract.

Clanton—Saw Mill.—S. A. Blasingame is rebuilding his saw mill, reported last week as burned.

Cordova—Mining.—It is reported that Capt. Long has sold a two-third interest in his mineral lands to parties who will open mines at once, build houses, &c.

Cullman—Coal Mine.—A coal mine is being opened, one mile from Cullman, by Schmidt Bros.

Decatur—Brick Works.—The Moulthrop & Stevens Brick & Tile Co., reported last week as being organized, will start brick works at once. The capacity will be 60 M daily.

Decatur—Plumbing Establishment.—It is reported that parties from Lee, Mass., will invest \$30,000 in starting a plumbing establishment.

Decatur—Grading.—The contract for grading the site for the car works, previously reported as to be moved from Urbana, O., to Decatur, by the United States Rolling Stock Co., has been let to Crass, Head & Montgomery and E. L. Withers & Bro.

Demopolis—Sash, Blind and Furniture Factory.—There are prospects of a sash blind and furniture factory and a barrel factory being started.

Gadsden—Hotel.—J. Billings will build a hotel.

Gadsden—Electric Lights.—The Gadsden Electric Light Co. will, it is reported, add machinery for incandescent lighting.

Gadsden—Temple.—A three-story building, to cost about \$10,000, will be erected for the Masons.

Gadsden—Natural Gas.—A gas well will be sunk.

Greenville—Furniture and Bucket Factory.—A stock company is being formed to start a furniture and cedar bucket factory. Richardson & Steener can give particulars.

Guntersville—Canning Factory.—The Wyeth City Land & Improvement Co. will start a canning factory shortly.

Guntersville—Paper Mill.—The Wyeth City Land & Improvement Co. have made arrangements to build a paper mill, and will begin work as soon as the weather permits.

Irontdale—Furniture Factory.—A furniture factory is talked of. If anything is done, the Irontdale Co. can probably give information.

Irontdale—Reservoir.—It is reported that parties are considering erecting a reservoir. The Irontdale Co. can probably give particulars if anything is done.

Isbell—Manufactories.—It is reported that J. E. Isbell has sold lands to parties who contemplate establishing manufactories.

Muscadine—Shingle Mill.—H. M. Marteen has lately erected a shingle mill near Muscadine.

O elika—Building.—R. G. Williams and L. F. Dickson will erect a two-story brick building, 50x100 feet.

Selma—Railroad.—The Cincinnati, Selma & Mobile Railroad Co. (office, Montgomery), are making surveys for the extension of their road from Hamburg to Selma.

Selma—Paper Mill.—It is reported that H. B. Williams, of Ottawa, Ill., is making investigations as to the advantages of Selma as a location for a paper mill.

Sheffield—New Town.—A new town is reported to be laid out on the Sheffield & Birmingham Railroad, at or near Big Bear Creek.

Talladega—Buildings.—Fred A. Osborne contemplates erecting several brick buildings.

Talladega—Wire Goods Factory.—A. Hoot, of Bell View, Mich., George Woodberry and J. T. Lovell will start a factory to manufacture wire goods. They will be known as the Spring Wire Cot & Bed Co.

Thompson—Stave Factory.—The capital of the company, reported last week as being formed by D. Patterson and others to manufacture barrel staves, will be \$250,000. Prices of machinery for manufacturing staves and headings are wanted.

Tuskaloosa—Coal Mining, &c.—New Orleans, La., and New York parties will organize the Tuskaloosa Coal, Coke & Transportation Co., to mine coal, manufacture coke, and operate barge lines on the Warrior river. The company will have a capital stock of not less than \$500,000, and will begin active operations shortly. W. C. Jemison can give particulars.

Tuskaloosa—Ice Factory.—Mr. Keefer has been prospecting, with a view to building an ice factory.

Wheeling—Coke Ovens.—The Woodward Iron Co. are building 125 coke ovens previously reported, and are relining their No. 2 furnace.

ARKANSAS.

Alexander—Water Works.—A company has been formed to build water works.

Ashton—Lumber Mill.—The Empire Lumber Co., capital stock \$20,000, has been organized to operate a saw and planing mill, with C. M. Barnes, of Fort Smith, as president, and D. H. Barnes, Little Rock, secretary and treasurer.

Fayetteville—Electric Lights.—The Fayetteville Electric Light & Power Co., lately mentioned as organized, have let contract for their building, and expect to have their plant in operation by April. They will probably use the Heisler system of incandescent lighting.

Fort Smith—Canning Factory.—The Fort Smith Canning Co. have increased their capital stock from \$12,000 to \$27,000, and not to \$65,000, as lately stated. They will add the manufacture of cans next year.

Golden City—Smelting Plant.—The Sylph Mining Co. contemplate erecting a smelting plant at Golden City or in Polk county.

Golden City—Smelting Plants.—The Emily Mining Co. and the Logan County Mining & Smelting Co. will erect the smelting plants lately reported.

Harrisburg—Gin.—The gin of George Jones, lately reported as burned, will be rebuilt in the spring.

Hope—Lumber Mill.—The Hope Lumber Co., capital stock \$30,000, has been chartered to manufacture flooring, ceiling, sash, blinds, furniture, shingles, &c., with Louis Werner, William Grayson, O. G. Schulenberg, of St. Louis, Mo.; J. T. West and C. T. White as directors. Mr. White is president.

Hot Springs—Hotel.—The New York Hotel Co., capital stock \$500,000, has been chartered to build a large hotel, with bath house and laundry. S. W. Fordyce, of St. Louis, Mo., is president.

Little Rock—Stone Works.—R. S. Miller & Co., of Des Moines, Iowa, are starting artificial stone works.

Little Rock—Machine Works.—E. C. Weberfritz will build an addition to his Union Machine Works.

Little Rock—Box Factory.—The name of the party reported last week as contemplating erecting a box factory at some point in Arkansas is C. L. Merrill. His address is Indianapolis, Ind.

Little Rock—Telephone.—The Bay Telephone Co., capital stock \$10,000, has been incorporated to manufacture and sell telephones and electrical supplies. J. L. Bay is president.

Mammoth Spring.—The Mammoth Spring Improvement & Water Power Co. will hold a meeting on February 23 to increase their capital stock to \$250,000.

Ozark—Canning Factory.—The name of the company previously reported as to start a canning factory is the Ozark Canning Co. The company will also put up jellies, pickles, &c. The capital stock is \$25,000. W. W. Jennings is president.

Plummerville—Telephone Line.—Arthur Malone contemplates building a telephone line to Morrilton.

FLORIDA.

Arcadia—Cigar Factory.—Warren & Williams and John J. Philbrick, of Key West, have purchased a site to build a large cigar factory.

Bloomfield—Bridge.—Bids are being received for building an iron drawbridge across the Ocklawaha river.

Bonifay—Hotel.—The West Florida Land Co. contemplate building a new and larger hotel.

Bronson—Cigar Factory.—An effort is being made to have a cigar factory established. J. V. Burke can probably give information if anything is done.

Carrabelle—Planing Mill.—Machinery has been purchased for a planing mill.

Cedar Keys—Canal.—It is reported that Mr. Anderson, of New York, and others have been considering building a ship canal from the St. John's river to Cedar Keys. If anything is done John F. Donall, Cedar Keys, can give information.

Chipley—Fertilizer Factory.—Lewis and Frederick Wiseloge will, it is stated, soon begin work on their fertilizer factory, previously reported.

Chipley—Hotel.—A company is reported as being formed to build a hotel. A. E. Chandler can probably give information.

Daytona—Bridge.—The company previously reported as to be formed to build a bridge across the Halifax river has been organized, with Charles A. Ballough as president, and W. F. Stewart, secretary and treasurer. The capital stock is \$8,000. A street railroad will probably be built also.

Daytona—Temple.—The Masons have purchased a site to build a temple.

De Funiak Springs—Furniture Factory.—The De Funiak Lumber Co. are not building a furniture factory, as reported last week. Other parties may build such a factory.

Fernandina—Water Works.—The mayor will shortly want bids for building the water works previously reported.

Florida—Timber Lands.—E. E. Jackson & Co., of Salisbury, Md., have purchased 35,000 acres of yellow pine timber lands. They will probably begin developing the latter part of this year.

Key West—Cigar Factory.—A cigar factory has been started by Koenigsburg, Falk & Co.

Lake City—Cigar Factory.—Joseph F. Baya will erect a cigar factory.

Ocala—Canning and Cigar Factories.—There is talk of a canning and a cigar factory being started.

Ocala—Hotel.—E. G. Ridout, of New York, will build a 22-room hotel ten miles from Ocala. Plans have been prepared by George McKay.

Pensacola—Dry Dock.—There is talk of building a dry dock. If anything is done the mayor can probably give information.

Pensacola—Railroad.—F. C. Brent, B. R. Pitt, Henry Baars and others have incorporated the company to build the railroad from Mobile to Pensacola reported last week.

Sanford—Fertilizer Factory.—J. E. Graham, of Staunton, Va., will start the fertilizer factory reported last week.

Starke—Broom Factory.—F. G. Miller will start a broom factory, to be known as the Florida Broom Factory.

Starke—Box Factory.—J. C. Clarke is starting the cigar box factory reported last week.

GEORGIA.

Alapaha—Gin and Mill.—S. B. Downing will rebuild his gin and mill, lately reported as burned. He wants to purchase machinery.

Albany—Church.—The Baptists will build a church to cost about \$10,000.

Albany—Church.—The Methodists contemplate erecting a new building.

Americus—Water Works.—The \$30,000 of bonds previously reported as to be issued for building water works have been sold, and work on the plant will probably soon be commenced. The mayor can give information.

Athens—Chair Factory.—Davis Hodges has started a chair factory near Athens.

Atlanta—Asylum.—The contract to erect the building for the Jewish Orphan Asylum, previously reported, has been let to Olive & Co. at \$34,000.

Atlanta—Soap Factory.—J. L. Bell and A. K. Ackerman, of Atlanta, J. F. Qain, of Chicago, Ill., and F. W. Miller, of Mobile, Ala., have chartered the Bell's Pure Soap Co., capital stock \$50,000, to manufacture soap.

Atlanta—Railroad.—The company previously reported as being organized by J. W. English and others to build a railroad from Atlanta to the Chattahoochee river, seven or eight miles, will soon make surveys and begin grading. It is to be standard gauge.

Atlanta—Houses.—The East Atlanta Land Co. contemplate building ten or twelve houses to cost about \$5,000 each.

Atlanta—Match Factory.—B. H. Cameron, T. R. Logan, T. J. Hightower, W. W. Austell and J. A. Scott have chartered the Piedmont Manufacturing Co., capital stock \$10,000, to manufacture matches and hollow wooden ware.

Augusta—Exposition.—The Augusta National Exposition Co. for Colored People has been chartered, with a capital stock of \$15,000, by L. H. Holsey and others.

Canton—Stamp Mill.—J. T. Roberts, manager, will erect a new stamp mill at the Micou gold mine.

Canton—Saw Mill.—Mr. Mager will erect a saw mill at Downing Creek.

Cartersville—Railroad.—The Etowah Mining & Manufacturing Co. are receiving bids for building a railroad from their mines to the Western & Atlanta Railroad.

Cedartown—Railroad.—It is reported that the East & West Railroad Co., (office, Cross Plains, Ala.) will spend \$200,000 in improvements, purchasing new rolling stock, &c.

Cedartown—Ore Lands.—Samuel Noble, of Anniston, Ala., will purchase another tract of iron ore land.

Dawson—Cotton Compress.—There are prospects of a cotton compress being erected, probably by Hitt & Co., of Americus.

Griffin—Cotton Mill.—The Kincaid Manufacturing Co. is being organized to build a mill to manufacture plaids and cottonades. The capital stock will be probably \$125,000. W. J. Kincaid is interested and can give particulars.

Holly Springs—Marble Quarry.—A marble quarry on the land of R. A. Evans is being opened.

Jasper—Cotton Factory.—The Harmony Mills contemplate replacing some of their twist, spoolers and ring-spinning frames with new ones.

Jesup—Railroad.—The East Tennessee, Virginia & Georgia Railroad Co. (office, Knoxville, Tenn.) are making surveys for the road from Jesup to Jacksonville, Fla., about 110 miles, reported last week.

Knoxville—Jail.—Proposals for building a brick jail on stone foundation with iron or steel cages will be received until March 6 by B. Le Sueur.

La Grange—Iron Foundry.—J. T. Buchanan talks of starting an iron foundry.

La Grange—Cotton Factory.—There is talk of building a cotton factory. If anything is done J. L. Robertson can give information.

Lawrenceville—Jail.—Proposals for building a two-story brick and stone jail, 32x29 feet, with a jailor residence, 31x44 feet, will be received until March 21 by J. D. Spence.

Louisville—Jail.—Proposals for building a jail will be received until April 3 by James F. Brown.

Macon—Furniture Factory.—The furniture factories reported last week as to be erected by L. McManus and Philip Dohn are one and the same. They, with Thomas W. Ansell and Wilber T. Shinholser, have incorporated the Macon Furniture Co.; capital stock, \$8,000. The factory will be two stories, 80 by 250 feet.

Macon—Street Railroad.—It is reported that Haines & Bros., of New York, have contracted to build the dummy railroad, previously reported, for the Macon City & Suburban Railway, Light & Power Co.

Madison—Grading.—Martin & Co. have contracted to grade the Covington & Macon Railroad through Madison.

McConnell—Gold Mining.—St. Louis (Mo.) parties have purchased and will develop the Charles gold mine.

Milledgeville—Cracker Factory.—W. T. Conn & Co., reported last week as contemplating building a cracker factory, write us that they will not do so at present.

Nacoochee—Mining.—The Calhoun Gold Mining Co. have purchased 4,000 acres more of gold lands.

Newnan—Carriage and Buggy Factory.—Parks & Arnold have started their carriage and buggy factory, previously reported, and are looking for a site to build a permanent factory.

Orange—Saw Mill.—A saw mill and other machinery have lately been erected by Latham & White.

Rome—Spoke and Handle Factory.—A Pennsylvania party has been corresponding with A. B. G. Moseley in regard to starting a spoke, handle and hub factory.

Rome—Water Works.—J. H. Reynolds and G. W. F. Lamkin have asked for permit to build the water works at East Rome, lately reported.

Savannah—Houses.—D. B. Lester has let the contract for 20 tenement houses, and will build 20 more.

Silver Creek—Iron Mines.—W. L. Hickman, of St. Louis, Mo., is opening the iron mines referred to last week. He will ship to car-loads daily.

St. Simon's Mills—Cedar Mill.—It is reported that a company have leased ground to build a cedar (saw) mill. J. E. Young can probably give information.

Tallahassee—Ice Factory.—E. C. Pierce, reported last week as contemplating erecting an ice factory, states that he will erect it about April 1.

Thomasville—Ice Factory.—W. S. Keefer will build an ice factory.

Tunnel Hill—Gin and Corn Mill.—C. Hunt is preparing to erect a cotton gin and corn mill.

Ty Ty—Saw Mill.—J. J. McDonal will probably erect a saw mill, but has not fully decided.

KENTUCKY.

Ashland—Street Railroad.—A. A. Campbell, A. H. Savage and others have asked for permit to build a street railroad.

Ashland—Mining.—E. E. Dwight, H. S. Willard, M. L. Sternberger, John F. Hager and R. M. Broas and others have chartered the Cannel Development Co. to develop mineral lands. The capital stock is \$125,000.

Booneville—Coal Mine.—Sylvester Isaacs has opened a coal mine four miles from Booneville.

Covington—A bill has been introduced in the legislature at Frankfort to authorize the city to issue bonds for street improvements.

Covington—Brewery.—It is reported that the Schlitz Brewing Co., of Milwaukee, Wis., will build a \$50,000 brewery. Paul Leader, Covington, can probably give particulars if correct.

Frankfort—Laundry.—R. Ferguson is erecting a steam laundry.

Frankfort—Ice Factory.—The Capital Brewing Co. are adding new ice machinery with a daily capacity of 13 tons.

Frankfort.—Bills have been introduced in the legislature to incorporate the Kentucky Carbon & Iron Co.; the North Jellico Coal Co., with J. B. Speed, J. P. Byrne, W. N. Culp and others as corporators; the Paducah & Illinois Bridge Co., to build a bridge across the Ohio river at Paducah, with Samuel R. Bullock, of New York, Charles Reed, Samuel Houston and others as corporators; the Cincinnati, Chicago & Charleston Bridge Co.; the Carrollton & Prestonville Bridge Co., to build a bridge to cost about \$60,000 across the Kentucky river at Carrollton; the Bowling Green Land & Improvement Co.; the Woodford Railway Co.; the Grand Avenue & Park Co.; the Kentucky Trust & Improvement Co.; the Springfield, Perryville & Long River Turnpike Road Co.; the Harrodsburg Water Co.; the Barbourville & Manchester Turnpike Road Co.; the Pennsylvania & Kentucky Iron & Coal Co.; the Lily Mining & Manufacturing Co.; the Hodgenville & Buffalo Turnpike Co.; the Rugby Railway & Mining Co.; the Mineral Land, Investment & Transportation Co.; the Paducah Belt Railway & Levee Co.; the Plum Creek Mining Co.; the Covington Hill-Top Belt Railway Co.; the Clifton, Newport, Covington & Cincinnati Railway Co.; the Henderson State Line Railroad Co., and the Lawrenceburg Storage & Warehouse Co.

Frankfort.—The Frankfort Safety Vault & Trust Co. has been incorporated by William Lindsay, John P. Starks and others.

Henderson—Machine Works.—It is reported that Miller & Broede, of Evansville, Ind., contemplate moving their machine works to Henderson.

Hopkinsville—Lime Works.—J. L. Connell and P. Cansler have purchased lime works and will enlarge them. Will manufacture barrels also.

Lexington—Railroad.—A company is being formed to build a belt railroad about 14 miles long. J. E. Keller can give information.

Louisville—Woolen Mills.—The Beargrass Woolen Mills are contracting for buildings and machinery to more than double their capacity.

Louisville—Boot and Shoe Factory.—Theodore Cuniotti and others are organizing a \$100,000 stock company to manufacture boots and shoes.

Louisville—Street Railroad.—The Central Passenger Railway Co. contemplate building several new roads, either cable or electric. They will introduce electric motors on their lines with a view to their adoption.

Louisville—Hall.—The Young Men's Christian Association contemplate erecting a large hall.

Newport—Church.—The Presbyterians will build a new edifice. Rev. H. S. Steward can give particulars.

Newport—Brewery.—George Wiedemann has let the contract for the brick work of his new brewery to Clark Bros., of Bellevue, at \$23,608, and the contract for the carpenter work to H. A. Schriver at \$17,000.

Owensboro—Distilleries.—The Sourmash Distilling Co. have purchased the distillery of the E. C. Berry Distilling Co. and the distillery of the John Hanning Distillery Co.

Pineville—Courthouse and Jail.—The contract to build the courthouse and jail

previously mentioned has been let to Esau, Wiggins, Brawner & Co., of Richmond, Ky., at \$22,251.

Pineville—Coal Mining.—Veins are being opened on the lands lately mentioned as purchased by J. F. Slusher. The property will, it is said, be developed at once.

Shelbyville—Church.—The Presbyterians will spend from \$15,000 to \$20,000 in building a church.

Stinson—Coal Mine.—The Lexington & Carter County Mining Co. are opening cannel coal mines. They have built a tram road.

Tompkinsville—Courthouse.—Monroe county will build a \$6,000 courthouse.

West Fork—Flour Mill.—The flour mill of John W. Barker has lately been remodelled to the roller system.

Wide-awake—Distillery.—The Carroll Distilling Co., capital stock \$100,000, has been incorporated to manufacture whiskies by Samuel Block, Frank H. Suethole and Albert N. Jett.

LOUISIANA.

Alexandria—Timber Lands.—Eddy Bros., of West Branch, Mich., are inspecting timber lands with a view to purchasing.

Baton Rouge—Tannery.—A. Frank is working up a stock company to start a tannery.

Louisiana—Timber Lands.—It is reported that S. M. Weston, of Grand Rapids, Mich., has recently purchased 400,000 acres of timber lands.

New Orleans—Building.—It is reported that the city will erect a \$10,000 building, to be used as a House of Refuge. The mayor can give information, if correct.

New Orleans—Hall.—The Young Men's Christian Association contemplate building a large hall.

New Orleans—Electrical Supplies.—The American Safety Signal System Co., capital stock \$100,000, has been chartered to manufacture electrical devices, supplies, &c. Durante Du Ponte is president, Edgar H. Farrar, vice-president, and Julius Weiss, treasurer.

Shreveport—Electric Lights.—A \$100,000 stock company has been organized to erect an incandescent electric light plant. Bell & Randolph can give particulars.

MARYLAND.

Baltimore—Houses.—W. T. Ostend, Jr., will erect 20 two-story houses on Covington street.

Baltimore—Show Case Factory.—The Richard Sauer Manufacturing Co. have secured a site at Locust Point, to erect a large new factory to manufacture show cases and curtain poles.

Baltimore—Soap Factory.—Samuel R. Hogg will put a 40 horse-power boiler and engine in his soap factory on Arch street.

Baltimore—Cedar Works.—The Baltimore Cedar Works, 239 Sharp street, will put in a 35 horse-power engine and boiler.

Baltimore—Gilbert Doherty, 667 West Fayette street, will put in an 8 horse-power boiler and engine.

Baltimore.—The Electro Automatic Transit Co., capital stock \$1,000,000, has been organized with B. F. Gambrell as president, Thomas W. Johnson, vice-president, William M. Pegram, secretary, Alexander Brown, treasurer, and David G. Weems, general manager and electrician. The object of the company is to "carry on the forwarding or express business in this State and elsewhere by electricity and other means, and for the construction, owning, chartering or leasing of steamboats, wharves, docks, roads, vehicles or other property required for the purpose of such forwarding or express business, and buying, owning, controlling, using and disposing of by license or otherwise such patent rights relating to the use of electricity as may be deemed proper and necessary by the corporation."

Baltimore—Saw Mill.—James T. Wallace will start a wood-sawing and splitting mill at 1730 Ridgely street.

Baltimore—Bank.—The new building previously reported to be erected corner South and Lombard streets, for the Farmers' & Mechanics' National Bank, will cost about \$60,000. It will be 52x115 feet. The old building will be torn down soon.

Baltimore—Houses.—Joseph M. Cone will erect 13 three-story houses on Lanvale street, 20 on Myrtle avenue, and 30 on Dolph street.

Calonsville—Railroad.—The extension of the Calonsville Short Line Railroad (office, Baltimore), to Ellicott City is proposed.

Centerville—Flour Mill.—The stock company, previously reported as being formed to rebuild the burned flour mill of J. H. Hall, will also build a roller corn and hominy mill. Will contract for machinery the latter part of this month.

Ellicott City—Barrel Factory.—Fite & Co., of Baltimore, have purchased a site to build a flour barrel factory. This is probably the same as the factory previously reported to be started by Solomon Hose.

Ellicott City—Schools.—A bill will be introduced in the legislature at Annapolis to authorize the Howard county commissioners to issue \$6,000 of bonds to build schools.

Fountain Green—Canning Factory.—A canning factory is to be started by William H. Harward.

Friendship—Canning Factory.—William E. Robinson & Bro. will start a canning factory.

Harford County—Canning Factory.—Seneca & Spencer will add some machinery to their canning factory, and Ely & Fox will enlarge their factory.

Mill Green—Canning Factory.—Charles Allen and John Snodgrass will start a canning factory.

Perryville—Canning Factory.—E. Owens will start a canning factory.

Port Deposit—Canning Factory.—George W. Baker, of Aberdeen, has been prospecting with a view to starting a canning factory.

Port Deposit—Flour Mill.—The Rock Run Flour Mill, operated by George W. Fox & Sons, will be remodeled to the roller system. The capacity will be 40 barrels daily. John H. Hunter, of Rising Sun, has the contract.

Washington, D. C.—Houses.—T. F. Schneider will erect 20 residences; C. V. Trent, 3 houses to cost \$10,500, and C. V. Trent and J. W. Roberts, two houses to cost \$5,400.

Washington, D. C.—Hotel.—Plans are being prepared for a five-story hotel to be built on Pennsylvania avenue at Fifteenth street. Commissioner Webb can give information.

Woodberry—Gas and Water Works.—The Consumers' Water & Illuminating Co., previously reported as to build gas and water works, &c., have let the contracts for a low pressure engine and a high pressure engine to the Worthington Steam Pump Co., of New York; for blowing engine, to Phoenix Iron Co., of Trenton, N. J., and for the stone work and laying of about 82,000 feet of pipe, to Jos. L. Brooks & Co., of Hampden.

MISSISSIPPI.

Jackson.—Bills have been introduced in the legislature to incorporate the Mississippi & Gulf Railroad Co.; the Meridian Cotton Mills; the Meridian Belt Railway Co.; the Williamson Landing Steam Ferry Co.; the Greenville Street Railroad Co.; the Southern Construction Co., and the Meridian Road Co.

Meridian—Pipe and Terra Cotta Works.—Parties have been prospecting with a view to establishing works to manufacture pipe, terra cotta, fire-brick, etc. If anything is done C. C. Chalk can give information.

Tupelo—Iron Foundry.—It is reported that an iron foundry is being erected.

NORTH CAROLINA.

Asheville.—A company will be formed with a capital stock of probably \$400,000 to establish one or more manufactories. N. Atkinson, W. W. Deming and others are interested.

Asheville—Houses.—The C. E. Graham Manufacturing Co. will build more tenement houses.

Asheville—Woolen Mill.—A company is being formed and will shortly be organized to build a woolen mill.

Bakersville—Mining.—It is stated that R. C. Roberts, F. C. Griffith and others, of Chattanooga, Tenn., have leased mica lands and will open mines.

Blue Wing—Copper Mining.—C. R. Savidge, of Sunbury, Pa., reported last week as purchasing the Royster copper mines, has, with others, incorporated the Blue Wing Copper Co., capital stock \$500,000, to develop them. They will probably erect reduction works, but have not definitely decided.

Bush Hill—Mining.—J. M. Tomlinson has been prospecting mineral lands.

Cabarrus County—Mining.—Joel Reed is erecting a custom mill.

Charlotte—Canning Machinery.—Thomas Garibaldi and others, lately reported as contemplating starting a canning factory, are now purchasing machinery.

Charlotte—Cigar Factory.—A cigar factory will be moved from Hickory to Charlotte.

Charlotte—Furniture Factory.—Elliott & Marsh are preparing to enlarge their furniture factory, lately mentioned.

Charlotte—Cotton Factory.—The Ada Manufacturing Co., reported last week as purchasing a site for their factory, have decided to begin business with a capital stock of \$150,000, instead of \$100,000.

Clinton—Canning Factory.—Nicholson & Cooper contemplate starting a canning factory and want to purchase machinery.

Falling Water—Cotton Mill.—A company will probably be formed to build a cotton mill, saw mill, spoke and handle factory, and to develop granite quarry, &c. H. L. Davidson, Mountain Island, can give information.

Forest City—Shuttle-block Factory.—A shuttle-block factory is to be started.

Goldsboro—Furniture Factory.—The Goldsboro Furniture Co. are adding a large brick repository, and are not enlarging their factory, as mentioned last week.

Goldsboro—Foundry.—Dewey Bros. are building a new iron foundry, 42x52 feet, and will put in an improved cupola and cranes.

Greensboro—Street Railroad.—J. W. Griffith has asked for permit to build a street railroad.

Henrietta—Cotton Mill.—The Henrietta Mills, previously reported, will probably weave fine ginghams.

High Point—Railroad.—A. B. Andrews, of Raleigh, vice-president Richmond & Danville Railroad Co., states that the work of extending the Winston & Fayetteville Railroad to Asheville will be commenced about May 1.

Hope Mills—Cotton Mill.—The Hope Mills Manufacturing Co. will build an additional cotton mill to cost about \$100,000. Their present mill, which is being enlarged, has 5,508 spindles and 110 looms.

King's Mountain—Cotton Factory.—W. A. Mauney & Bro. are interested in the company reported last week as being formed to build a cotton factory. The name will be the King's Mountain Manufacturing Co.

Lumber Bridge—Tram Road.—T. D. Love and others are raising money to build a tram railway from Lumber Bridge to Willis's Creek.

Moore County—Gold Mine.—W. B. Walker developed a gold mine.

Mt. Airy—Saw Mill.—L. S. Siceloff will erect a saw mill and other machinery near Mt. Airy, and wants to purchase machinery.

Oxford—Hotel.—N. A. Gregory has been elected president, E. T. White secretary and John Webb treasurer of the \$25,000 stock company reported last week as formed to build a hotel.

Oxford—Planing Mill.—Mr. Kivett is building a new planing mill.

Oxford—Water Works.—Arrangements are being made for the building of water works. Robert W. Winston can give particulars.

Oxford—Railroad.—The contract to build the extension of the Oxford & Clarksville Railroad from Oxford to Durham, about 32 miles, has been let by the New York & Southern Construction Co. to L. Wright & Co. and A. & C. Wright.

Raleigh—Knitting Factory.—It is reported that a New York company contemplate erecting a knitting factory at some point in North Carolina. John T. Patrick can give information if anything is done.

Raleigh—Sewerage System.—Mr. Ludlow has finished preparing plans, estimates, &c., for the sewerage system, previously reported. The cost will be about \$75,000. The mayor can give information.

Raleigh—Gas Works.—The name of the company recently mentioned as being organized by Julius Lewis is the People's Gas Co. The capital stock is \$30,000. Works will be built at once.

Raleigh—Bridges.—The contract to build the two iron bridges lately reported has been let by the county commissioners to the King Iron Bridge Co., of Cleveland, Ohio, at \$8,500.

Raleigh—Cotton Mill.—The Falls of Neuse Manufacturing Co. will add 1,280 spindles and 12 looms to their factory at Haw River. They now have 2,240 spindles and 141 looms.

Raleigh—Sewerage System.—The sewerage committee will advertise for bids for building the sewerage system previously reported. \$150,000 of bonds will be issued.

Rocky Mount—Iron Works.—The Rocky Mount Iron Works, reported last week as reorganizing, will go more extensively into the manufacture of plows and agricultural implements. They want the address of manufacturers of plow devices.

Rutherfordton—Shoes.—It is reported that a company has been formed to manufacture shoes.

Salem—Foundry and Machine Works.—Kester Bros. are building an iron foundry, as reported last week; also a machine shop.

Stony Creek—Spoke and Handle Factory.—B. F. Carpenter, of Salisbury, will erect a factory to manufacture spokes, handles, shuttle blocks, &c.

Shelby—Cotton Mill.—The capital stock of the company lately mentioned as to be formed to build a cotton mill will be probably \$100,000. James L. Webb, D. M. Baker and others are interested.

SOUTH CAROLINA.

Charleston—Cotton Mill.—The Charleston Cotton Mills, lately mentioned as chartered to operate the cotton mill now at Charleston, will increase their capital stock from \$250,000 to \$300,000.

Cheraw—Buildings.—J. M. Pennington, N. C., will probably soon erect a block of 8 brick store buildings with iron fronts.

Chester—Cotton Mill.—A company is to be formed to build a cotton mill. W. T. D. Cousar can give information.

Columbia—Cotton Mill.—The two companies previously reported as being organized to build cotton factories have consolidated and will be known as the Capital Cotton Mills. George K. Wright can give information.

Columbia—Building.—Edwin I. White, of Charleston, and Frank Niernsee have been appointed architects for the completion of the State Capitol. There is \$50,000 yet to be expended in finishing hall and

library, plumbing etc. They are now preparing plans.

Greenville—Electric Lights.—Asbury & Son have made a proposition to light the city with electricity, and will erect the plant previously reported if they secure the contract.

Greenwood—Sash and Blind Factory.—A sash and blind factory will be erected by Messrs. Cummings, Johnson and Wilkerson.

Lancaster—Cotton Mill.—The Lancaster Cotton Mills, capital stock \$100,000, have been chartered to build the factory reported last week. David J. Carter can give information.

Lancaster County—Chlorination Plant.—It is reported that the Haile Gold Mining Co. are erecting a chlorination plant.

Rock Hill—Cotton Mill.—The Standard Cotton Mills, capital stock \$100,000, has been incorporated by John R. Landon, W. J. Roddey, W. B. Wilson, Jr., Thomas A. Crawford, W. M. Frew and others.

Spartanburg—Cotton Factory.—A company will probably be formed to build a cotton mill.

TENNESSEE.

Athens—Sash Factory.—Mukley & Thurston have put some new machinery in their sash, door and blind factory.

Bristol—Car and Machine Works.—It is stated that Adam Ferg. of Tremont, Pa., and others have secured an 8-acre site to build large car and machine works.

Chattanooga.—The East End Building & Loan Association is being organized.

Chattanooga—Building.—J. Black & Co. have contracted to erect a large four-story building for the Southern Land & Loan Co. and Theodore Richmond. The cost will be about \$40,000.

Chattanooga—Warehouse.—The warehouse reported last week as to be built by the Loomis & Hart Manufacturing Co. will be of brick, three stories, 60x250 feet. Plans are being prepared.

Chattanooga—Cotton Mill.—The Whitney Mills contemplate refitting with 3,500 spindles and 100 looms.

Cumberland Gap—Planing Mill.—The report lately referred to that a planing mill has been started is not confirmed.

Dayton—Mining.—A. C. Blevins is organizing the Dayton Gold & Silver Mining Co., with a capital stock of \$50,000.

Dresden—Hotel.—A hotel is reported to be built.

Huntingdon—Woolen Mill.—The Huntingdon Woolen Mills (Co.) is being organized to start the woolen mill lately reported. Hastings & Co. can probably give information.

Johnson City—Telephone.—The Holston Telephone Co. has been chartered to build a line to Jonesboro.

Loudon—Saw Mill.—The saw mill of D. R. Samuel & Co. is being repaired and improved.

Memphis—Exposition.—The Six States Exposition has been chartered to hold an exposition by R. S. Snow, James Lee, Jr., Napoleon Hill and others.

Memphis—Water Works.—The Memphis Artesian Water Co., previously reported, have, it is said, purchased the plant of the old company and will add 15 miles of pipes, put down 20 wells, build stand pipe and erect two pumping engines with a daily capacity of 10,000,000 gallons. The improvements will cost \$700,000.

Murfreesboro—Water Works.—Water works are to be built. W. B. Garrett can give particulars.

Nashville—Monument.—M. Muldoon & Co., of Louisville, Ky., have received the contract to build a monument to cost \$15,000.

Newbern—Saw Mill.—The saw mill reported last week as to be erected by C. C. Mengel, Jr., & Bro., of Louisville, Ky., will be built at Newbern. The daily capacity will be about 40 M feet.

Oliver Springs—Saw Mill.—It is rumored that Slawson & Co., of Dayton, Tenn., will move their saw mill from Kentucky to Oliver Springs.

Oliver Springs—Sash and Door Factory.—It is reported that a sash and door factory will be started by John Bruce & Sons.

Oliver Springs—Church.—The Baptists will build a church.

Ringgold—Flour Mill.—W. P. Hambaugh has remodeled his flour mill to the roller system.

Shelbyville—Railroad.—A subscription of \$35,000 has been voted to the Decatur, Cincinnati & New Orleans Railroad.

TEXAS.

Austin—Institute.—Work will at once be commenced on the addition to the Colored Blind and Deaf and Dumb Institute. The cost will be \$25,000.

Austin—Fire Alarm System.—The Union Fire-Alarm Co., of New York, have contracted to erect a fire alarm system.

Bells—Coal Mines.—Coal mines will be developed.

Clarksville—Corn Mill.—James Jamison has added a corn mill to his ginney.

Cleburne—Electric Lights.—The Thompson-Houston Co. have contracted to erect an electric light plant.

Corsicana—Iron Works.—The Eagle Iron Works, of Fort Worth, are to be moved to Corsicana.

Corsicana—Hall.—The Old-Fellows contemplate building a hall.

Dallas—Flour Mills.—The Empire Flour Mills are preparing to double their capacity.

Dallas—Church.—The Congregational Church contemplate building a new edifice, to cost about \$30,000.

Dallas—House.—James Moroney has let contract for a house, to cost \$7,000.

Dallas—Hotel.—J. A. Walden will build a two-story hotel, and has awarded the contract.

Dallas—School.—Powell & Co. have contracted to erect a school building to cost \$4,100.

Dallas—Refrigerator.—There is talk of starting a small refrigerator, to cost about \$50,000.

Decatur—Electric Lights and Water Works.—A \$100,000 company has been formed to build the electric light plant and water works lately mentioned, also a street railroad. A. Edmonds or A. R. Whiteside can give information.

Decatur—Mining.—The name of the company reported last week as being formed to develop a silver mine is the Decatur Mining Co. Sewell Brown is president, and L. P. Terrell, secretary.

Decatur—Street Railroad.—H. Greathouse will commence work on his street railroad, reported last week, as soon as the right of way is secured.

Denison—Railroad.—The Denison, Bonham & New Orleans Railroad Co. will issue \$15,000 of bonds per mile to complete their railroad.

Denison—Railroad.—Edwin D. Chadwick, Samuel S. Shellenberger, John R. Carr, Silas Y. Eddy, James J. Campbell and others have incorporated the Choctaw Coal & Railway Co., capital stock \$1,000,000, to build a railroad from the Red river to a point on the Fort Worth & Denver Railroad in Wise county.

Duffau—Flour Mill.—The Farmers' Mill Co., lately reported, contemplate adding to their corn mill and gin a flour mill during this year.

Fort Worth—Electric Lights.—Arrangements are being made for the erection of an incandescent electric light plant, to cost \$50,000. W. H. Little can give particulars.

Fort Worth—Building.—The Fort Worth Board of Trade invites plans for their large building, lately reported. It is to be about

six stories, about 75x100 feet. The cost is not to exceed \$86,500.

Fort Worth—Bridge.—The Fort Worth & Denver Railroad Co. are preparing to build their iron bridge across the Trinity river, previously reported.

Galveston—Lumber.—Proposals for about 500 M feet of best quality yellow pine lumber, free from sap, wind shakes and knots, will be received until February 25th by B. Adoue.

Galveston—Street Improvements.—The city will issue \$200,000 of bonds for street improvements. The mayor can give particulars.

Hico—Flour Mill.—The Duffau Roller Flour Mill will, it is said, be moved from Duffau to Hico. Its capacity is about 100 barrels daily.

Jacksboro—Flour Mill.—The W. A. Huffman Implement Co., of Fort Worth, reported last week as purchasing a flour mill, will build a 100-barrel roller flour mill, and have purchased all machinery except rolls. They will charter a company with a capital stock of \$25,000.

Laredo—Smelting Works.—Robert S. Towne, of Kansas City, Mo., and August Meyer will shortly incorporate the Mexican Ore Co., to build the smelting works previously reported.

Laredo—Car Shops.—It is rumored that the Mexican National Railway Co. will build large car shops.

Palo Pinto—Oil Lands.—James B. Simpson and others have formed a company to develop oil lands. They have purchased about 2,000 acres of land, and have one well sunk.

San Antonio—Warehouse and Compress.—It is reported that subscriptions are being raised towards building a warehouse and a cotton compress.

San Antonio—C. Upson and others have incorporated the Bexar Building & Loan Association, capital stock \$200,000.

Sherman—Coal Mine.—James Brack is sinking a shaft to test the coal on his land near Sherman.

Sherman—Flour Mill.—It is reported that the Farmers' Alliance has decided to build their proposed flour mill at Sherman. The capacity will be probably 150 barrels per day.

Terrell—Medicine.—The Cotton Patch Bitters Co., capital stock \$18,000, has been incorporated by J. T. Walker, George W. Clark and others.

Waco—Railroad.—The Waco & Brazos Railway Co., reported last week, have organized with William Cameron as president; E. Rotan and Samuel Sanger, vice-presidents; John H. Finks, secretary, and J. W. Mann, treasurer. Surveys will be made at once, and part of the road will soon be under contract.

VIRGINIA.

Alexandria—Distillery.—J. & E. Mahoney, of Norfolk, will, it is said, soon put in operation the Arlington Distillery, lately purchased by them.

Alone—Canning Factory.—The name of the company reported last week as being formed to start a canning factory is the Alone Canning Co. The capital stock is \$1,000. O. B. Powers and others are interested. Machinery will be purchased at once.

Ashland—Hotel.—A hotel is reported to be built.

Blue Ridge Springs—Canning Factory.—M. Y. Riely will start a canning factory, and wants to purchase machinery.

Crews—Houses.—John P. Pettyjohn, of Lynchburg, has contracted to build five more houses at Crews; also several more at Bluefield.

Danville—Tobacco Factory.—Wemple, Ellerson & Co. contemplate enlarging their tobacco factory.

Danville—Furniture and Wagon Factory.—A company will be chartered to manufac-

ture wagons, furniture, &c. The capital stock will not be less than \$10,000.

Fincastle—Canning Factory.—A canning factory will be started by John Hoffman and Mr. Nofsinger.

Fincastle—Canning Factory.—L. P. Holaday will enlarge his canning factory.

Forest Depot—Canning Factory.—A. W. Scott and others will start a canning factory.

Houston Mines—Canning Factory.—J. N. Slear & Co. will start a canning factory.

Lexington—Mining.—Ores from the property of the Virginia Tin, Mining and Manufacturing Co. are being tested by parties who contemplate leasing and developing the property.

Lowry—Canning Factory.—Mr. Beacham and others will start a canning factory.

Lynchburg—Building.—John P. Pettyjohn has contract to erect for M. Doyle a four-story brick, iron front building, 17x132 feet. He will commence work at once.

Middletown—Canning and Cheese Factories.—Several canning and cheese factories are reported to be started soon. C. B. Gayer can give information.

Natural Bridge—Canning Factory.—C. P. Nair and P. N. Burger will start a canning factory.

Norfolk—Ice Factory.—The Norfolk Crystal Ice & Refrigerating Co., reported last week, will build a 10-ton ice factory and a cold-storage warehouse, with 10,000 cubic feet of space. They expect to be in operation by May 1st.

Petersburg—Car Works.—It is rumored that parties have been prospecting near Petersburg for a site for car works.

Petersburg—Cotton Mill.—The Blue Ridge Manufacturing Co. have contracted for a water-power equipment for their mill, and will add some new machinery to their carding-room.

Portsmouth—Reservoir.—The Portsmouth Water Co., previously reported, will soon commence work on a reservoir, 60x150 feet, by 60 feet deep. The capacity will be 2,500,000 gallons.

Pulaski City—Church.—The Presbyterians are having plans made for a church, to cost either \$6,000 or \$7,000. W. H. Nicholson can give particulars.

Richmond—Buildings.—The buildings at the State Penitentiary, lately mentioned as burned, will be rebuilt at a cost of \$50,000.

Richmond.—The bills previously reported as introduced in the legislature to incorporate the Norfolk & Cape Henry Railroad & Hotel Co., the Berkley Street Railroad Co. and the Berkley & Currituck Turnpike Co. have become laws.

Richmond.—Bills have been introduced in the legislature to incorporate the Southern Paper & Pulp Co., with a capital stock of not less than \$20,000 or more than \$200,000, and A. L. Ellett, E. B. Addison and others as incorporators; the Lambert's Point Turnpike Co.; the Portsmouth & South Mills Railway Co., and the Atlantic Wharf & Dock Co.

Roanoke—Rolling Mill.—The Roanoke Rolling Mill Co., previously reported, have organized with S. B. Haupt as president and N. H. Maher, secretary and treasurer. They will soon commence work, and want machinery for a mill to cost \$100,000.

Salem—Canning Factory.—The Salem Canning Co. will probably enlarge their factory.

Snowville—Electric Lights.—Parties are corresponding with a view to having an electric light plant erected.

South Boston—Electric Lights.—The company mentioned as formed to erect an electric light plant will receive bids for all the machinery. Address E. L. Evans.

Tazewell C. H.—Tannery.—A steam tannery is reported as contemplated.

Warsaw—Saw Mill.—A saw mill is being built near Warsaw by J. D. Garland.

Woodstock—Canning Factory.—An effort is being made to start a canning factory.

WEST VIRGINIA.

Buckhannon—Lumber.—S. B. Phillips, G. M. Fleming, S. P. London, T. A. London and A. G. Griffin have incorporated the Upshur Boom & Lumber Co., to construct booms, manufacture lumber, &c. The authorized capital stock is \$100,000.

Charleston—Fire Clay.—The fire-clay on the land of Charles Hazelett, near Charleston, will probably be developed.

Charleston—Saw Mill.—A new saw mill is being erected near Charleston by A. Devereux.

Morgantown—Building.—F. D. Anderson and S. D. Herschman will erect a large building.

Moundville.—The Mound City Building Association has been chartered by George W. Bruce, F. H. Blake, J. T. Burley and others. The capital stock is not to exceed \$300,000.

Thomas—Coke Ovens.—H. G. Davis & Bro., of Piedmont, will build 100 coke ovens in the spring.

Wheeling—Water Works.—Machinery for direct pumping is to be added to the water works.

BURNED.

Albany, Ga.—The turpentine still of Irving Bros.

Catahoula Parish, La.—The gin of Willis J. Watson.

Chatham, Ky.—The saw and grist mill of Appleman Bros.; loss \$3,500.

Pineville, Ky.—The dry kiln of Mr. Asher.

Savannah, Ga.—The steam gin and cotton pickery of J. W. Teeple; loss \$1,500.

Walnut Hill, Ark.—The gin of A. Barwell.

Rebuilding Saw Mill.

CLANTON, ALA., Feb. 8, 1888.

Editor *Manufacturers' Record*:

My mills were burned the night of 1st inst. Am rebuilding as fast as possible; everything total loss except boilers.

S. A. BLASINGAME.

Will Enlarge Cotton Mill.

ASHEVILLE, N. C., Feb. 13, 1888.

Editor *Manufacturers' Record*:

We will add this spring 100 to 150 more looms to our cotton factory; also more tenement houses.

C. C. GRAHAM MFG. CO.,

C. C. GRAHAM, Pres.

Brass and Iron Works to be Started.

CORSICANA, TEXAS, Feb. 11, 1888.

Editor *Manufacturers' Record*:

A brass and iron works will be established here this year. A. F. WOOD.

Will Improve Cotton Mill.

PETERSBURG, VA., Feb. 10, 1888.

Editor *Manufacturers' Record*:

The Blue Ridge Manufacturing Co. held their yearly meeting, as usual, at the Gary Hotel, in Petersburg. The report was very satisfactory. We have given out the contract for a fine water-power equipment to the Hercules Water Wheel Co., Worcester, Mass. When complete, will have the best plant of the kind in the State. We also intend to add some machinery to the carding department. The above improvements will be complete in about seven weeks. After the new additions we hope to be able to patronize our electric lights by running our mill night and day.

E. E. GAMBRILL, Superintendent.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Canning machinery is wanted by Nicholson & Cooper, Clinton, N. C. They also want information as to the prices they can get for sweet gum, black gum, poplar, white oak, juniper, &c.

Canning machinery is wanted by Rieley Bros., Blue Ridge Springs, Va.

Cotton Machinery.—The Beaver Creek & Huff Mills, Fayetteville, N. C., want to purchase one second-hand 36-inch single beater, combined opener and lapper, in good order.

Electric Lights.—Bids for an electric light plant to be erected at South Boston, Va., will be received by Joseph Stebbins or E. L. Evans.

Flour and Corn Mill Machinery.—A company is being formed at Centerville, Md., to build a roller flour, corn and hominy mill, and will contract for machinery the latter part of this month. J. H. Hall can give particulars.

Furnace Heater.—George B. Hendricks, Fort Worth, Texas, wants the address of parties who manufacture or sell heating apparatus for churches.

Gin Machinery.—S. B. Downing, Alapaha, Ga., wants to purchase machinery to rebuild his mill and gin.

Phosphate Machinery.—T. S. Moorhead, secretary Southern Society Civil Engineers, Jacksonville, Fla., wants to correspond with manufacturers of special machinery for grinding and pulverizing phosphates.

Plow Devices.—The Rocky Mount Iron Works, Rocky Mount, N. C., wants the address of manufacturers of plow devices.

Rolling Mill Machinery.—The Roanoke Rolling Mill Co., Roanoke, Va., will want at once machinery for a mill to cost \$100,000.

Saw Mill.—L. S. Siceoff, Mt. Airy, N. C., wants to purchase saw mill and other machinery.

Screens.—A. Armstrong, Tryon City, N. C., wants the address of manufacturers of or dealers in revolving coal and gravel screens.

Spoke and handle machinery is wanted by W. D. Young, Tallulah, Ga.

Stave Machinery.—D. Patterson, Thompson, Ala., wants prices on machinery for manufacturing staves and headings.

Water Works.—Bids for constructing water works at Fernandina, Fla., will shortly be wanted by the mayor.

A Fine Spindle Cotton Mill

HENRIETTA, N. C., Feb. 10, 1888.

Editor Manufacturers' Record:
The Henrietta Mills will start 5000 spindles on single chain warps about March 1st. Capacity of mill 15,000 spindles and 300 looms. Will probably weave fine ginghams. Putting in electric lights, automatic sprinklers and steam heating.
H. M.

To Develop Copper Mines.

SUNBURY, PA., Feb. 13, 1888.

Editor Manufacturers' Record:
The Blue Wing Copper Co. have purchased lands in Greenville county, N. C., and propose developing the mineral resources. The probabilities are that reduction works will be erected, but it is not a certainty. They will first develop the mines.
C. R. SAVIDGE.

Additional Machinery.

RALEIGH, N. C., Feb. 13, 1888.

Editor Manufacturers' Record:
The Falls of Neuse Manufacturing Co. will enlarge by putting in 1,280 additional spindles and 12 looms, making the former 3,520 and the latter 153.

G. ROSENTHAL, Sec. and Treas.

To Build Saw Mill.

LOUISVILLE, KY., Feb. 10, 1888.

Editor Manufacturers' Record:
We are about to build a mill near Newbern, Tenn. P. O. at the time the mill is completed will be Newbern. The capacity of this mill will be 40,000 feet per day, and the lumber cut will be largely poplar.
C. C. MENGEL, JR., & BRO.

To Build Railroad.

GALVESTON, TEXAS, Feb. 9, 1888.

Editor Manufacturers' Record:
The Galveston & Jetty Railway, recently chartered by authority of the State of Texas, is intended to build from the depots in Western part of the city along the bay front and on East to extremity of the island, thence out some three miles or more into the Gulf of Mexico. Its main object is now to run materials for building the jetties, and may eventually be used in reaching deep water where artificial work will give a good harbor.
A. M. SHANNON.

Iron Ore Lands to be Developed.

TUNNEL HILL, GA., Feb. 11, 1888.

Editor Manufacturers' Record:
One company here now prospecting for manganese, bought property; paid cash; this is a Michigan company. A company from Canada will commence prospecting for red hematite ore near here inside of ten days. Another company from Michigan closed contract to-day for a large body of land and will commence mining in ten days. Anderson, Wylie & Co. will commence shipping their manganese from here at once. C. Hunt, of this place, is preparing to put up a large steam cotton gin and corn mill.
C. O. DAVIS.

Improvements at Oxford.

OXFORD, N. C., Feb. 8, 1888.

Editor Manufacturers' Record:
A brick hotel to cost \$25,000 will be built by a joint stock company, Thompson-Houston electric lights will be put in Oxford by 11th of April; contract signed. The city council met this evening to arrange for water works. The last spike in our new railroad, Oxford & Clarksville, driven 8th February, 1888. Mr. Rivett is putting up new planing mill.
ROBT. W. WENSTER.

Will Enlarge Woolen Mills.

LOUISVILLE, KY., Feb. 10, 1888

Editor Manufacturers' Record:
We are now letting out contracts for buildings and machinery that will a little more than double our capacity. We have been making 23 hours out of every 24 for the past two years, and hope we will still be able to keep up the record with the new facilities.
BEARGRASS WOOLEN MILLS.

Will Build Hotel.

ANNISTON, ALA., Feb. 8, 1888.

Editor Manufacturers' Record:
We will begin, at once, the erection of a splendid building to be used as a hotel, embracing two stores in the building. The property will be worth ten thousand dollars when improved.
J. P. GARNER & SON.

To Build Street Railroad and Electric Light Plant.

DECATUR, TEX., Feb. 7, 1888.

Editor Manufacturers' Record:
A company, with a capital of \$100,000, has been formed and incorporated to light Decatur with electric lights, to build street railway and water works. We expect to soon have the railway and lights in operation. I will give information.
A. EDMONDS.

Increased Capital Stock.

FORT SMITH, ARK., Feb. 8, 1888.

Editor Manufacturers' Record:
We have called in another \$15,000 of stock, making it now \$27,000, and we expect to put up not less than 500,000 cans of tomatoes, corn, peas and beans. The feature of a can factory, in addition to our canning factory, will not be added until next year.
FORT SMITH CANNING CO.

Will Enlarge Plant.

FORT SMITH, ARK., Feb. 4, 1888.

Editor Manufacturers' Record:
We will make considerable improvements in our plant during the spring. We will increase our capacity and enlarge our building. Our plant is doing a good business and is a grand success.
FORT SMITH ELEC. LIGHT & P. CO.

Machinery Wanted.

THOMPSON, ALA., Feb. 9, 1888.

Editor Manufacturers' Record:
I am getting up a stock company here with a capital of \$2,500, for the purpose of putting up stave factory. I would like to hear from different parties in regard to the price of machinery to make all kinds of staves and headings. Would like to start some time this spring.
D. PATTERSON.

Adding New Ice Factory.

FRANKFORT, KY., Feb. 9, 1888.

Editor Manufacturers' Record:
We are now putting in a new ice factory in connection with our brewery, and will turn out 13 tons of ice daily from April 1st next. A steam laundry is being erected here by R. Ferguson.
CAPITAL BREWING CO.

Canning Factories

FINCATTLE, VA., Feb. 9, 1888.

Editor Manufacturers' Record:
Mr. John Hoffman and Nofsinger will commence canning this summer. Mr. L. P. Hollady will increase his factory to double the capacity of last year. Mr. J. N. Slicer & Co. will erect one on S. V. R. R. near Houston Mines.
W. J. PRICE.

To Build Large Warehouse.

CHATTANOOGA, TENN., Feb. 8, 1888.

Editor Manufacturers' Record:
We contemplate building a warehouse to be used for finishing and storing furniture; it is to be occupied by ourselves to hold the products of our manufactory. Plans are now being drawn; the building will be brick, 60x250 feet, three stories.
THE LOOMIS & HART MFG CO.

Starting Foundry and Machine Works.

SALEM, N. C., Feb. 8, 1888.

Editor Manufacturers' Record:
We are starting a foundry and machine shop and intend to build saw mills, wood planers and matchers, shingle mills, shafting, pulleys, hangers, rip saw mandrels, cut-off saw mandrels of all kinds, tobacco box groovers, mill spindles, gearing and general repairing.
KESTER BROS.

To Manufacture Tobacco.

LOUISVILLE, KY., Feb. 8, 1888.

Editor Manufacturers' Record:
We have formed the Willett Tobacco Manufacturing Co., to manufacture plug and smoking tobacco. Ernst Koch is president.
S. M. STOKES, Man.

Contemplate Adding Flour Mill

DUFFAU, TEXAS, Feb. 6, 1888.

Editor Manufacturers' Record:
We contemplate adding a flouring mill to our gin and corn mill sometime during the year.
FARMERS MILL CO.

Will Add \$50,000 of Machinery.

BIRMINGHAM, ALA., Feb. 9, 1888.

Editor Manufacturers' Record:
We are going to issue \$50,000 bonds to put in special machinery to manufacture cotton ties, light hoops, bands, &c. Expect to enlarge our plant during the coming summer by the addition of a plate and sheet mill.
ALABAMA ROLLING MILL CO.

To Start Brick Works.

DECATUR, ALA., Feb. 7, 1888.

Editor Manufacturers' Record:
We have organized a brick company here and expect to begin work at once. Our capacity will be 60,000 per day.
CHAR. TIPPIN.

To Build Cotton Factory.

KING'S MOUNTAIN, N. C., Feb. 8, 1888.

Editor Manufacturers' Record:
We have company forming here to build a cotton factory. Will organize on the 15th of this month and elect officers. W. A. Mauney & Bro. are the largest stockholders. Nearly all the citizens of our place have taken stock and a great many of the farmers. It will be styled the King's Mountain Manufacturing Co.
W. A. MAUNEY.

Will Erect Large Show Case Factory.

BALTIMORE, MD., Feb. 9, 1888.

Editor Manufacturers' Record:
We are about erecting at Locust Point a factory of some magnitude.
THE R. SAUER MFG. CO.

Smelting Plants to be Built.

HOT SPRINGS, ARK., Feb. 9, 1888.

Editor Manufacturers' Record:
Two or more plants for reducing ores will be erected at Golden City, this spring, one by the Emily Mining Co. and one by the Logan County Mining & Smelting Co. The Sylph Mining Co. will put up works there or in Polk County, Ark.
E. L. COOK.

Electric Light Plant.

CLEBURNE, TEXAS, Feb. 9, 1888.

Editor Manufacturers' Record:
A contract has been made with the Thomson-Houston Electric Co. to put a plant in our city within 120 days.
J. L. GILLUM.

Bids For Building Courthouse Wanted.

JASPER, GA., Feb. 10, 1888.

Editor Manufacturers' Record:
The plans of Bruce & Morgan, Architects, were selected for the new courthouse at Jasper, Ga., and bids are now advertised for the work.
H. HOOD, Ordinary.

Will Enlarge Bloomary.

ANNISTON, ALA., Feb. 10, 1888.
Editor Manufacturers' Record:
We hope to increase our capacity very shortly, as our business will be too large for our present plant.

THE ANNISTON BLOOMARY.

Box Factory Contemplated.

LITTLE ROCK, ARK., Feb. 11, 1888.
Editor Manufacturers' Record:
The gentleman who contemplates the erection of a box factory at this point is C. L. Merrill, of Indianapolis, Ind. They will work 100 men. Hon. John C. Shoemaker is president of the above company.
E. A. NEWMAN, Sec'y.

To Build 100 Coke Ovens.

PIEDMONT, W. VA., Jan. 26, 1888.
Editor Manufacturers' Record:
We expect to extend the road from Thomas, W. Va., to Leadsville, W. Va., 35 miles. H. G. Davis & Bro., of this place, have ovens now in operation at and near Thomas, and intend building 100 more (coke ovens) early in the spring.
WEST VIRGINIA CENTRAL R. R. Co.,
G. W. HARRISON, Supt.

Erecting 20-Ton Smelting Plant

HOT SPRINGS, ARK., Feb. 9, 1888.
Editor Manufacturers' Record:
The Jonestown Mining & Milling Co. are putting down a 20 ton plant to work their property situated 1½ miles south of Hot Springs, Ark. A mill run gives us \$56 to the ton—\$52 gold and \$4 silver. Part of our machinery is now on the ground.
P. D. McCULLOCH.

Will Build Foundry and Machine Shop.

BIRMINGHAM, ALA., Feb. 7, 1888.
Editor Manufacturers' Record:
The shops we propose erecting at Bessemer, Ala., will be a foundry of 10 tons capacity daily—size 66x73 feet, two story; machine and pattern shop, 40x66 feet, with blacksmith and other shops. Will begin erection of same within 30 days.
GEO. W. BEGGS & BROS.

Will Start Brick Works.

DADEVILLE, ALA., Feb. 10, 1888.
Editor Manufacturers' Record:
I will commence the brick business some time this spring. Don't know what kind machinery I will use.
W. F. HOLLY.

Building New Foundry

GOLDSBORO, N. C., Feb. 13, 1888.
Editor Manufacturers' Record:
We are constructing a new foundry building 42 by 52 feet, which will be fitted up with improved cupola and cranes. This will give us more room for the enlargement of our machine shops. We are quite busy on general repair work and in manufacturing the "Success" cotton seed crusher which is rapidly growing in favor.
DEWEY BROS.

Crate and Basket Factory.

POCOMOKE CITY, MD., Feb. 8, 1888.
Editor Manufacturers' Record:
We have started a crate and basket factory in Pocomoke City. We are now in working order, and have the capacity of turning out about 1,000 crates and 35,000 baskets per day. The crates and baskets were patented January 10, 1888, by T. W. Lankford, and we have entire control of the same.
SCHOOLFIELD, POLK & CO.

Flour Mills Remodeled.

RINGGOLD, TENN., Feb. 9, 1888.
Editor Manufacturers' Record:
We have just changed our mill at this place to short roller system, and have taken out some machines, and put in some new ones. Mr. John W. Barker, of West Fork, Christian county, Ky., has lately changed his stone to a short roller system mill.
W. P. HAMBAUGH.

To Build Masonic Temple.

ROANOKE, VA., Feb. 3, 1888.
Editor Manufacturers' Record:
The Masonic Temple Association, of Roanoke, was chartered to-day, with maximum capital of \$50,000.
W. F. WINCH.

WACO, TEXAS, Feb. 9, 1888.

Editor Manufacturers' Record:
The citizens of Waco have formed a company to build a railroad down the Brazos Valley from Waco, Texas. Charter has been obtained for 65 miles of the road. Ultimate intention of incorporators is to extend the road to mouth of Brazos river, on Gulf of Mexico. Wm. Cameron is president, and J. H. Finks, secretary. Work will begin at once. Surveying party is now being organized. JAMES J. MOORE.

Will Build Ice Factory and Cold Storage Warehouse.

NORFOLK, VA., Feb. 13, 1888.
Editor Manufacturers' Record:
We have formed an ice and refrigerating company, and will be ready for work not later than May 1, 1888. Capacity, 10 tons ice per day and 30,000 feet cold storage.
NORFOLK CRYSTAL ICE & REFRIG. CO.,
CHAS. GURLEY, Prest.

Woolen Mill to be Built.

HUNTINGDON, ALA., Feb. 9, 1888.
Editor Manufacturers' Record:
A woolen mill will be built here. The stock has all been taken. The name is Huntingdon Woolen Mills.
H. C.

Canning Factory.

ALONE, VA., Feb. 10, 1888.
Editor Manufacturers' Record:
The Alone Canning Co. completed its organization to-day, with a paid-up capital stock of \$1,000. The buildings will be put up at once, and all necessary machinery, etc., purchased right away. Everything will be ready for the coming season. Main building, 24x50 feet. Stockholders are O. B. Powers and others.
S. L. KIRKPATRICK.

Brick Yard.

OZARK, ALA., Feb. 11, 1888.
Editor Manufacturers' Record:
I intend starting a brick-yard at Ozark in a few days, with one brick machine with a capacity of 25,000 per ten hours.
B. S. BROWN.

To Build Ice Factory.

TALLAPOOSA, GA., Feb. 11, 1888.
Editor Manufacturers' Record:
I shall put in an ice factory here about April 1st. There is going in a broom factory here also, and a man from Maine is talking of putting in a chair factory.
E. C. PIERCE.

Tobacco Factory.

HAMILTON, ONTARIO, Feb. 6, 1888.
Editor Manufacturers' Record:
We intend starting a branch factory in Danville, Va., under the management of our junior member, Mr. G. T. Tuckett, about the middle of this month, to manufacture our T. & B. smoking tobacco.
GEO. E. TUCKETT & SON.

Starting Tannery.

PITTSBORO N. C., Feb. 7, 1888.
Editor Manufacturers' Record:
Chatham Tannery will commence this week. Capacity at present 600 or 700 hides yearly. Will dress as well as tan their leather. Hope to increase soon.
W. L. LONDON.

Will Enlarge Gas W. rks.

FORT SMITH, ARK., Feb. 6, 1888.
Editor Manufacturers' Record:
We expect to put in two benches of 66, and lay about 5 miles street mains.
FORT SMITH GAS LIGHT CO.

Will Erect Electric Light Plant.

LITTLE ROCK, ARK., Feb. 4, 1888.
Editor Manufacturers' Record:
Our company is organized, and is going to go ahead and build right away. The name of the company is Citizens' Incandescent Electric Light Co. Capital stock is \$50,000. Meyer Pollock is president.
M. W. BENJAMIN.

Agricultural Implement Factory.

STATESVILLE, N. C., Feb. 6, 1888.
Editor Manufacturers' Record:
We are now erecting buildings for the purpose of manufacturing plows and other agricultural implements, well buckets, etc. Will be running in 60 days at farthest. A cotton factory will be erected during the year; also a shoe factory.
STATESVILLE AGRICUL. IMP. MFG. CO.,
C. A. CARLTON, Sec'y.

CUMBERLAND FURNACE, TENN., }
Feb. 4, 1888.

Editor Manufacturers' Record:
We contemplate building a short line from our furnace (Cumberland) to the Nashville & Chattanooga Railroad, intersecting at Contrary Ponds or Dickson.
DROUILLARD IRON CO.

Cotton Mill to be Built.

CHESTER, S. C., Feb. 13, 1888.
Editor Manufacturers' Record:
A cotton mill will be built here at an early day by the citizens of this place.
W. T. D. COUSAR.

OLIVER SPRINGS, TENN., Feb. 10, 1888.
Editor Manufacturers' Record:
It is stated that John Bruce & Sons will open up a sash and door factory soon; also that Slawson & Co., of Dayton, Tenn., will move their mammoth saw mill from Kentucky to this place. The Baptists will erect a large church here this spring.
A. A. ENGLISH.

Will Increase Capacity.

ASHEVILLE, N. C., Feb. 13, 1888.
Editor Manufacturers' Record:
We will increase our capacity 25 per cent.
GRAHAM SHOE CO.

Door Machinery Wanted.

BRISTOL, TENN., Feb. 3, 1888.
Editor Manufacturers' Record:
We contemplate putting in a door shop, and shall need door machinery, etc.
J. BUFFUM & CO.

Will Start a Guano Factory.

HARDWAY, GA., Feb. 13, 1888.
Editor Manufacturers' Record:
Will organize a guano company at Albany, Ga., under name and style of the Albany Fertilizer & Farm Improvement Co., with a capital stock of \$25,000.
F. F. PUTNEY.

A Big Coal and Coke Company.

TUSKALOOSA, ALA., Feb. 11, 1888.
Editor Manufacturers' Record:
This company has just closed contract with a party of New Orleans and New York capitalists to establish at this point a company to be known as the Tuskalooosa Coal, Coke & Transportation Co. The business of said company will be to mine, manufacture coke and operate barge lines on the Warrior river. They will commence operations with a capital of over half a million of dollars. We expect to complete the final arrangement with them in a few days, when this coal and coke company will go actively to work in the enterprise indicated. This coal and coke company will be one of the strongest companies in the South, and will do an immense business.

Steam coal has sold delivered in this market at \$1.25 per ton this season, and screenings of low grade at \$1 per ton delivered.

TUSKALOOSA COAL, IRON & LAND CO.,
W. C. JEMISON, Prest.

Paper Mill to be Built.

FORT WORTH, TEXAS, Feb. 8, 1888.
Editor Manufacturers' Record:
A company has been formed with a capital stock of \$80,000 to start a paper mill, and as soon as the machinery can be bought work will commence at once. We have the finest water in the State to make paper. The water is almost free from all impurities, and is as clear as a crystal. We have 135 artesian wells that will give us 15,000,000 gallons of water in 10 hours. We have more water and better water than any city in North Texas.
GEO. B. HENDRICKS.

To Manufacture Matches.

ATLANTA, GA., Feb. 11, 1888.
Editor Manufacturers' Record:
Application for charter has been filed for match factory to be incorporated as the Piedmont Manufacturing Co. The gentlemen interested in the new company are Messrs. B. H. Cameron, T. R. Logan, T. J. Hightoner, W. W. Austell and J. A. Scott. Capital stock \$10,000. Will manufacture matches and wooden hollowware.
M. M. WELCH.

Paper Mill and Canning Factory to be Built.

GUNTERSVILLE, ALA., Feb. 10, 1888.
Editor Manufacturers' Record:
We will open our lots for sale about the 15th of March. We have completed arrangements to establish a canning factory and a paper mill here this spring. Work will commence as soon as weather will permit. We want a woodenware man to contract with and a spoke and handle man.
WYETH CITY LAND & IMP. CO.
R. W. BELL, Sec'y.

Contemplate Building Flour Mill.

FOREST CITY, N. C., Feb. 10, 1888.
Editor Manufacturers' Record:
I contemplate building a flouring mill near this place at an early day. A stock company is being made to build a \$50,000 cotton mill at this place. The company has procured a charter, and will commence operation on the building in a short time. It is to be called the Forest City Cotton Mill.
A. R. HOMESLEY.

SOUTH PITTSBURG, TENN., Feb. 7, 1888.
Editor Manufacturers' Record:
We have just completed our electric plant—26 arc and 28 incandescent lights.
PERRY STOVE MFG. CO.

Mississippi Notes.

Agricultural and Manufacturing Items.

(Special correspondence MANUFACTURERS' RECORD.)

ABERDEEN, MISS., February 11, 1888.

The Okolona Banking & Grocery Co. was incorporated February 3, with a capital stock of \$100,000.

The work on the Mississippi river front at Greenville has been completed. Over \$80,000 was expended on this work, of which the town paid about \$50,000.

There will be a convention of the saw mill men and lumber dealers of North Mississippi, North Alabama and West Tennessee at Cornith on the 21st to organize a lumbermen's association to secure equitable freights, etc.

An immense increased area will be given to oats in Mississippi this season, and the success of the crop finds an unusual guarantee in the fact that the "seed oats" are almost all of home growth and saving.

Mr. Alphonse Ligrange, of Monterey, Mexico, last week purchased a carload of Jersey dairy cattle from the herds of W. B. Montgomery and other Oktibbeha county blood stock breeders. This is the first exportation of American bred Jerseys to that portion of Mexico, and if successful is destined to result in an extensive patronage to the cattle breeders of Mississippi.

The shipments of lumber from the port of Pascagoula, on our South coast, by sea from January 13 to February included the following:

	Feet.
Canada.....	992,491
Antwerp, Belgium.....	535,394
Havre, France.....	883,168
Bordeaux, France.....	149,576
London, England.....	305,147
Dardrecht, Russia.....	366,720
Buenos Ayres, South America.....	689,803
Key West, Fla.....	175,344
Total.....	3,396,643

In addition to the above shipments the Pascagoula Star-Democrat reports the export of 1,050,000 feet of lumber on the English vessel Carrie De Lap, but does not give destination.

The president of the Columbus & Decatur Railroad Co. at a recent citizens' meeting in Columbus stated that a contract was in process of consummation with a European company for the completion of that line before the end of 1890.

The electric light plant of the city of Aberdeen has received important additions and improvements. This town was one of the first in the South to adopt the electric light for street illumination.

Boonville, in Prentiss county is making large shipments of beef cattle to New Orleans and Memphis.

Up to January 27th the receipts of cotton by Yazoo City were 10,000 bales in excess of her total receipts last season.

Aberdeen commenced the month of February by organizing a building and loan association with a capital stock limited to \$300,000.

The shipment of early vegetables to Chicago has already commenced at bay St. Louis on our South coast.

The bank of Holmes county will commence operations this week at Lexington, with a capital of \$50,000.

Messrs. J. F. Dugger and H. H. Harrington, graduates of our State Agricultural and Mechanical College, have been appointed to the faculty of the Agricultural and Mechanical College of Texas—one as assistant professor of agriculture, and the other as professor of chemistry and physics.

The creamery at Macon, in Noxubee county, is shipping butter on contract to a leading dealer in Troy, N. Y. It gives the highest satisfaction, and nets the creamery from 27 to 28 cents per pound.

The L. N. Dantzer Lumber Co. was incorporated at Moss Point, in Jackson county, on January 24, with a capital stock of \$200,000. This company contains some of the most prominent saw mill men in South Mississippi.

All of the ship-yards on the South coast are actively and profitably employed.

The machinery for the cotton factory at Columbus will arrive in June, and it is expected that the factory will be in full operation early in the fall.

Messrs. B. F. Symons and S. B. Johnston have just established a new saw mill near Columbus, in Lowndes and are doing a flourishing lumber business.

The citizens of Aberdeen, who by the way always pull together and move as a unit in every progressive enterprise, held an enthusiastic meeting at the City Hall last week, and petitioned the legislature, which is now in session, for authority to subscribe as a corporation to an amount not to exceed \$250,000 for the establishment of factories and other industrial enterprises. If this authority is granted, of which there is little doubt, an election will immediately be held upon the question of voting the bonds of the city to an amount not exceeding \$100,000 for the establishment of a cotton factory, and this will probably be followed at an early day by the establishment of an extensive manufactory of wagons and agricultural implements from the grand hardwoods and other timbers with which that region is so richly supplied. It will be remembered that Aberdeen's first vote of bonds after the war was \$125,000 for the construction of the first of her three railroads. These were redeemable in 6 years, one-sixth annually, and they were at once taken by her own citizens.

The receipts of cotton at Aberdeen for the season up to February 2 amounted to 24,938 bales, against 23,521 in 1887.

It is reported that negotiations and investigations are pending that will probably result in the extending of the Cincinnati, Selma & Mobile Railroad from Akron, Ala., to connect with the Kansas City, Memphis & Birmingham, Illinois Central and Mobile & Ohio Railroads at Aberdeen. The distance from Akron to Aberdeen is only sixty miles, and about twenty miles of this distance is already graded. The Kansas City, Memphis & Birmingham Railroad has a bridge over the Tombigbee river at Aberdeen, which will add to the cheapness of constructing the new road.

Coal and Iron in the South.

Hon. Wm. D. Kelley has lately received the following letter from Knoxville, Tenn., in reference to the value of the home trade, which is worth republishing:

"KNOXVILLE, TENN., Feb. 9, 1888.—Hon. W. D. Kelley—Dear Sir: Referring to your letter of the 3d inst., I take leave to mail you to-day a copy of the Engineering and Mining Journal of January 7, containing an article of mine on the Tennessee coal field and the iron belts of Tennessee and North Carolina, with a map of the coal field. I hope you may find time to look it over. With such a region as this to develop, the absurdity of worrying about foreign trade is apparent. Our railroad lines are longer than England's lines on seas. That her flag floats in every sea and every port is only a proof that she has to hunt every corner of the earth for exchanges to keep her population fed and clothed. We would be just as well off for the next 200 years if ships were unknown. There is no other country so rich in variety and abundance of natural wealth and advantages for their profitable exchange as our own. No other people so well disposed and able to use whatever will minister to their comfort and welfare. Therefore, having the best stock and the best customers within our own borders, we have only to go on and develop our wealth symmetrically and solidly to lay a foundation for trade and prosperity as great as human effort can achieve and beyond comparison with other peoples or other times, and, as the current seeks the deepest and largest channel, when we shall get under proper headway, the trade of the world will inevitably, necessarily, flow to us. Yours truly, GEORGE B. COWLAM."

The Blast Furnaces of the United States on February 1.

Special interest attaches to a study of the blast furnace capacity now at work, since the business is recognized to be balancing closely between the efforts of buyers to depress the market and the endeavors of sellers to prevent a decline.

The effect of the strike in the anthracite region is worthy of special study, even to producers west of the Alleghany Mountains, to many of whom the sudden demand for coke from that quarter is a serious factor in the question of the future prices for the fuel they use.

The status of the anthracite furnaces is as follows:

	Furnaces in blast.	Capacity per week.
February 1, 1888.....	97	29,949
January 1, 1888.....	118	38,206
December 1, 1887.....	122	39,487
November 1, 1887.....	124	40,008
October 1, 1887.....	123	39,440
September 1, 1887.....	125	38,338
August 1, 1887.....	129	3,030
July 1, 1887.....	138	49,49
June 1, 1887.....	138	44,185
May 1, 1887.....	137	43,812
April 1, 1887.....	139	43,581
March 1, 1887.....	141	43,734
February 1, 1887.....	137	41,951
January 1, 1887.....	130	40,736

The effect of the coal strike is clearly apparent from the large reduction in the output of anthracite pig iron, to which, however, other causes like the falling off in the requirements of Bessemer pig contribute also. New York and New Jersey have not been affected, except by keeping plants out of blast, which, like the Andover, would otherwise be running.

The status of the bituminous and coke furnaces was as follows:

	Furnaces in blast.	Capacity per week.
February 1, 1888.....	136	73,019
January 1, 1888.....	143	81,101
December 1, 1887.....	144	88,835
November 1, 1887.....	151	90,459
October 1, 1887.....	152	89,183
September 1, 1887.....	145	83,124
August 1, 1887.....	113	68,091
July 1, 1887.....	98	47,319
June 1, 1887.....	98	44,865
May 1, 1887.....	148	83,399
April 1, 1887.....	148	81,796
March 1, 1887.....	146	79,689
February 1, 1887.....	145	79,257
January 1, 1887.....	137	73,422

In Virginia Gem was banked from the 18th to 31st, the mines being frozen. Palaski, the new furnace, has just been added to the list of producers. In West Virginia Belmont is out, and Top Mill, which was banked on the 20th of December, is still in that condition. It will, however, be blown in during the current month. Irondale blew in on the 5th ult. after putting in a new bosh. In Kentucky the new No. 2 stack of the Ashland Co. was blown in on the 30th, and is reported to be doing well.

In Alabama one of the Sloss furnaces has been out of blast for repairs since the 8th ult. The new Sheffield furnace has again gone out of blast. In Tennessee, Chattanooga is to go into blast again soon, and Citico in May. The two Dayton, two Rockwood, two South Pittsburgh and Sewanee were running on the 1st inst.

So far as the charcoal furnaces are concerned we may note that two Richmond are now running instead of one a month since. On the other hand, both of the Plattsburgh furnaces, in New York, are out, though one of them will go in in a few days. Millerton, too, has stopped producing for the present. Eagle, in Pennsylvania, is putting in a new hearth, and will be in operation in a short time. In Maryland only one of the Stickney furnaces is running, and that is to be banked or blown out on the 11th inst. In Kentucky Bellefonte and Hunnewell are running. In Virginia Beverly is out till May, and Cedar Run, Eagle, Raven Cliff, Reed Island, Speedwell and Wythe are not expected to go in before that time. Pierce and Walton only are making iron, and the latter is to go out in a few weeks. White Rock will make a short blast, beginning about March 1. In the Hanging Rock region there have been no changes of consequence. In Michigan Gogebic went into operation on the 15th ult. Among others, Antrim, Bangor, Elk Rapids, Gaylord, Martel

Spring Lake and Peninsula are at work. In Wisconsin National has gone out. In Tennessee Etna, La Grange and Warner report officially that they are producing. In Alabama both Shelby are again at work; Rock Run is in, as is Tecumseh and the two Woodstock. The latter were banked for more than half the month. On the whole, therefore, there has been little change in the capacity producing.—Condensed from Iron Age.

A New System of Rapid Transit.

BALTIMORE, MD., Feb. 14, 1888.

Editor Manufacturers' Record.

The mechanical contrivance, under the new system of rapid transit, invented by David G. Weems, Esq., of this city, and controlled by The Electro-Automatic Transit Company of Baltimore City, and which bids fair to revolutionize the world in this respect, is very simple, consisting of a light structure elevated some twenty feet from the ground, thereby offering no hindrance to the cultivation of fields over which it may pass. Cars, pointed at both ends, are run on two tracks, having also an upper or third rail which acts in the capacity of a guide-rail and conductor of the electric current. Each car is provided with an upper or guide-wheel at each end, whose flanges enclose the upper or guide-rail on each side, thus rendering the jumping of the track a matter of impossibility. The motive power consists of a permanent generator of certain prescribed horsepower, located at each end of the line, from which the current passes to the induction-rail, where it is immediately taken up by the traveling motor, to which one or more cars may be attached.

The whole train is automatic in its action, each car springing its own brakes in succession in passing a permanent trip-lever, located at a sufficient distance from the stopping place, after the train has already passed a point where the electric current has been cut off permanently, leaving the train to its own momentum only when the brakes are automatically applied.

At a meeting of the company, held February 13th, 1888, the following gentlemen were elected officers for the ensuing year: B. F. Gambrill, president; Thomas W. Johnson, vice-president; Wm. M. Pegram, secretary; Alex. Brown, treasurer; David G. Weems, general manager and electrician, and John N. Steele, counsel. W. M. P.

Will Build 10-barrel Flour Mill.

FORT WORTH, TEXAS, Feb. 11, 1888.

Editor Manufacturers' Record.

A full roller mill, with capacity of 100 barrels, will be erected at Jacksboro by us. The machinery is all placed except the rolls. The company will be chartered with a capital stock of \$25,000.

W. A. HUFFMAN IMP. CO.

To Build Street Railroad.

DECATUR, TEXAS, Feb. 11, 1888.

Editor Manufacturers' Record.

I have a charter from the city of Decatur to build a street railroad, but cannot get the right of way on the Fort Worth & Denver City Railroad at present. I shall commence to build as soon as that is accomplished. HENRY GREATHOUSE.

Canning Machinery Wanted.

BLUE RIDGE SPRINGS, VA., }
Feb. 13, 1888.

Editor Manufacturers' Record.

We anticipate erecting a canning factory for tomatoes, peaches and small fruits; capacity 300 cases per day, and will want machinery for same. RILEY BROS.

Electric Light Plant to be Erected.

FORT WORTH, TEX., Feb. 10, 1888.

Editor Manufacturers' Record:

Arrangements are under way for the erection of an incandescent electric light plant, to cost about \$50,000. W. H. Little can give particulars.

A. C. AYLESWORTH.

Will Build New Factory.

MACON, GA., Feb. 6, 1888.

Editor Manufacturers' Record:

We are going to commence building new furniture factory by February 16th. Building is to be 250x80, and two stories. Going to put in new engine and boiler. Will be in running order the latter part of March. PH. DOHN SON'S.

SALEM, N. C., Feb. 7, 1888.

Editor Manufacturers' Record:

John M. White, Esq., of Charlottesville, Va., has the option till March 5th to construct a street railway through the cities of Salem and Winston. The proposition is to begin work in April, and have the same finished by August of this year. Judge White represents the Southern Street Railway and Improvement Co.

C. H. FOGLE.

Brick Works.

MUSCADINE, ALA., Feb. 8, 1888.

Editor Manufacturers' Record:

Have just finished a new and improved brick machine, of 10 to 15 M capacity, and will as soon as weather opens up, say about 1st of April, start it to work making plain and fancy brick. Am testing our clays for fire-brick, and think have a fine quality. Works will be located near Muscadine depot, on Muscadine creek, on Georgia Pacific R. R. Am not at present running planing mill, but have just put a new shingle mill, bolter and dragsaw to work, capacity 10 M per 10 hours. Works located 2 1/2 miles north of this place on Edwardsville road. Material, yellow pine heart.

H. M. MARTENN.

To Start Canning Factory.

CLARKSVILLE, ARK., Feb. 6, 1888.

Editor Manufacturers' Record:

A company has just been organized at this place known as the Clarksville Canning Company, composed of citizens of the place and vicinity, for the purpose of erecting and operating a canning factory for fruits, vegetables &c. Capital stock authorized is \$20,000; about one-half subscribed. A. P. Mays is president and general manager.

J. N. BROWN.

FALLING WATER, N. C., Feb. 9, 1888.

Editor Manufacturers' Record:

A joint stock company will probably be organized for the purpose of erecting cotton mills and a saw mill, with machinery for spokes and handles; also to develop a fine gold vein and granite quarry situated on the Catawba river, an extensive tract of land, densely timbered, 37-5 feet fall of water in a mile, equal to 11-500 natural horse power, at low summer water. Subscriptions have begun and others solicited. Any information required will be given by addressing me at Mountain Island.

H. L. DAVIDSON.

C. R. MAKEPEACE & CO.
ARCHITECTS and MILL ENGINEERS
PROVIDENCE, R. I. Plans, Specifications and Estimates furnished for Cotton and Woolen Mills.

LOCKWOOD, GREENE & CO.

MILL ENGINEERS,
NEWBURYPORT, MASS.

PLANS AND SPECIFICATIONS FURNISHED FOR THE CONSTRUCTION, EQUIPMENT AND ORGANIZATION OF COTTON AND WOOLEN MILLS.

NOTICE TO Manufacturers.

Special attention is directed to persons engaged in manufacturing industries to the property of the South Baltimore Harbor & Improvement Co., located at Curtis Bay, about one mile southeast of Light Street Bridge, being the Southern Boundary of Baltimore City and near the extensive Car Works just completed and in operation. Particular notice of manufacturers East and North of Baltimore is called to this locality, which, besides its proximity to the Southern markets, has many advantages, such as railroad and water communications, cheap house rents, easy access to the city, &c., &c. The location is high and healthy, rising to about 160 feet above tide water. For further particulars apply to

WM. S. RAYNER,

Pres. S. B. H. & I. Co.

8 E. Lexington St. BALTIMORE.

R. H. NEILSON.

E. E. MASTERMAN.

R. H. Neilson & Co.

REAL ESTATE

Abstract Agents

Bond and Stock Brokers,

Tuskaloosa, Alabama.

Ten years' experience in handling Southern lands. Coal, iron and pine lands a specialty. Refer with permission to F. S. Moody, president First National Bank; J. H. Fitts, president Castle Hill Land Co., and Fitts' Bank.

Office up Stairs, Over Spiller's Store.

Well posted in coal and pine lands.

Blast Furnaces Wanted.

The Athens Mining & Manufacturing Co., Athens, Tenn., are erecting \$500,000 new manufacturing improvements upon their property, and are opening, with a new railroad, the finest iron fields in the South. They desire to have one or more blast furnaces located at Athens, and make the following offers to iron manufacturers and capitalists:

1. They will donate an excellent site free of cost, and in addition will give \$10,000 cash subsidy upon closing of contract and execution of satisfactory bond for the erection, as soon as practicable, of a furnace with 100 tons daily capacity; or will donate site and subscribe for \$25,000 stock. The same offers are made proportionately for furnaces of less capacity.
2. They will lease the mines upon royalty or will deliver at furnace both red and brown ores, superior in quality to any at present mined in the South, and which will yield not less than 50 per cent. in the furnace, at say \$1.25 to \$1.50 per ton, or anyway 10 per cent. less than ores proportionately rich cost Chattanooga furnaces. They will contract to deliver any number of tons daily. Lowest freight rates will be obtained on manufactured products to markets.

The finest limestone can be had on the property for cost of quarrying.

Coke can be had at Chattanooga prices. Analysis of the ores will be furnished upon application. No place in the United States has better advantages than Athens for the cheap manufacture of superior iron. The company reserves the right to select any one or two of such propositions as may be received.

Correspondence solicited.

R. J. FISHER, Treas. and Gen'l Man.

WANTED!

A Traveling Salesman for Mississippi, Alabama and Georgia—one who understands Ginning and Saw Mill Machinery and Engines, and who is acquainted with trade in those States. Address with references

Kingsland & Douglas Mfg. Co.
ST. LOUIS, MO.

THOMAS & GORMAN, CONTRACTORS,

HOUSTON, TEXAS.
WATER WORKS A SPECIALTY. Pipe Sewerage, Plumbing, Steam Heating, Iron and Steel Plate Work, Boiler and Iron Bridge Work. STAND PIPES, GAS HOLDERS and IRON TANK Work.

GREEN FOREST, Rockbridge County, Va.

Best location in the State for a Furnace. Vast beds of rich Buena-Vista iron are at hand. Coke at less than three dollars per ton. Eight acres for a site offered FREE on the S. V. R. and the R. & A. Railroad.

Best location for a Paper Mill. Supply of soft wood unlimited. Two acres FREE for a site.

Best location for a Woolen Mill. One acre FREE for a site. Large water power available. Write to

H. C. MOONAW.

WHO WANTS A GOOD Opportunity to Invest MONEY?

There are many who would like to invest safely and profitably. This can be done at Long Island Cotton Mills, in Catawba county, N. C., on the Catawba river. There are about 800 spindles, 6 cards, substantial frame building on massive rock pillars, 40 by 60 feet, two and a-half stories high. It is in good running condition, and operated every day. There is a 60-saw gin and No. 1 press. Also, corn and wheat mill, broad shoals, ample water the year around. Water abundant in worst droughts.

Address

LONG ISLAND MILLS,
Monbo, Catawba County, N. C.

SEALED PROPOSALS will be received by the Sewerage Committee of the Board of Aldermen of the City of Raleigh, N. C., at the Mayor's Office of said City, until 3 o'clock P. M. April 1st, 1888, for furnishing the materials and constructing the proposed system of pipe sewers for said City, maximum extent twenty (20) miles.

Copies of the general plans and specifications, forms of proposals and instructions to contractors may be obtained from the Chairman or Engineer of the Sewerage Committee. The Committee reserve the right to reject any or all bids.

J. L. LUDLOW,
Engineer.

C. C. LATTA,
Chairman of
Sewerage Committee.

To Builders of Pumping Engines.

SEALED PROPOSALS, addressed to the President and Directors of the Louisville Water Company and indorsed

PROPOSAL FOR PUMPING ENGINE, will be received at the office of the Louisville Water Company, No. 549 Third street, Louisville, Ky., until 12 o'clock M. of Monday, the second day of April, 1888, and at that time will be opened and read in the presence of the bidders or their representatives.

Bidders are required to state in their proposals, under oath, the names and residences of all the parties interested therein, whether as individuals or business firms and companies.

Bidders are required, with each proposal submitted, to inclose a certified check in the sum of ten thousand dollars (\$10,000) as a forfeit to the Water Company in case of a refusal, for any reason, to promptly enter into a contract and bond on the part of any bidder to whom the work may be awarded.

Bids must be made upon the accompanying blank form, in the filling up of which the price must be stated, both in written words and figures. Any bid submitted otherwise will be declared informal and rejected.

The person or persons to whom the contract may be awarded will be required to appear at the Water Company's office, with acceptable bondsmen as sureties, and execute the contract within six days from the date of notification that the work has been awarded to him or them; and in case of failure or neglect so to do he or they will be considered as having abandoned it and as being in default to the Louisville Water Company to the amount of the check deposited with the proposal as liquidated damages.

General plans and detailed drawings, with the specifications, can be examined at the Water Company's office from 9 A. M. to 5 P. M. until the day the bids are opened.

Not less than five bondsmen will be required from the party to whom the contract may be awarded, and the amount of the bond shall be \$100,000, for which sum the bondsmen shall be jointly and severally liable as a guarantee that the party entering into a contract for the above work shall, within the time specified, fulfill the obligations of the contract.

The sufficiency, solvency, character and business standing of the bondsmen shall be acceptable to the Water Company.

The Water Company reserves the right to reject any or all proposals submitted.

LOUISVILLE WATER COMPANY,
By CHARLES R. LONG, President.

D. W. K. PEACOCK,
Real Estate Agent,
CARTERSVILLE, GA.
Minerals a Specialty.
Refer to THE HOWARD BANK, Cartersville, Ga.
1 W. N. W. Atlanta, Ga.

West Point, Va.

A growing town. Property increasing in value. Factories invited. New enterprises exempt from taxation.

Splendidly located on York river.

Steamer lines to Europe, New York—Baltimore, &c.—

Oysters and fish in unlimited abundance. Surrounded by the great fruit and trucking country of Virginia. For any particulars desired, address,

E. WILKINSON, MAYOR.

To Contractors

SEALED PROPOSALS, addressed to the President and Directors of the Louisville Water Co. and indorsed

PROPOSAL FOR BUILDING ENGINE-HOUSE AND ENGINES, will be received at the office of said company, 549 Third street, Louisville, Ky., until 12 o'clock M. of Monday, the second day of April, 1888, and at that time will be opened and read in the presence of the bidders or their representatives.

Bidders are required to state in their proposals, under oath, the names and residences of all the parties interested therein, whether as individuals or business firms and companies.

Bidders are required, with each proposal submitted, to inclose a certified check in the sum of five thousand dollars (\$5,000) as a forfeit to the Water Company in case of a refusal, for any reason, to promptly enter into a contract and bond on the part of any bidder to whom the work may be awarded.

Bids must be made upon the accompanying blank form, in the filling up of which the price must be stated, both in written words and figures. Any bid submitted otherwise will be declared informal and rejected.

The person or persons to whom the contract may be awarded will be required to appear at the Water Company's office, with acceptable bondsmen as sureties, and execute the contract within six days from the date of notification that the work has been awarded to him or them; and in case of failure or neglect so to do he or they will be considered as having abandoned it and as being in default to the Louisville Water Company to the amount of the check deposited with the proposal as liquidated damages.

General plans and detailed drawings, with the specifications, can be examined at the Water Company's office from 9 A. M. to 5 P. M. until the day the bids are opened.

Not less than four bondsmen will be required from the party to whom the contract may be awarded, and the amount of the bond shall be \$50,000, for which sum the bondsmen shall be jointly and severally liable as a guarantee that the party entering into a contract for the above work shall, within the time specified, fulfill the obligations of the contract.

The sufficiency, solvency, character and business standing of the bondsmen shall be acceptable to the Water Company.

The Water Company reserves the right to reject any or all proposals submitted.

LOUISVILLE WATER COMPANY,
By CHARLES R. LONG, President.

To Contractors.

SEALED PROPOSALS, addressed to the President and Directors of the Louisville Water Co. and indorsed

PROPOSAL FOR BUILDING INLET AND RIVER WORK, will be received at the office of said company, No. 549 Third street, Louisville, Ky., until 12 o'clock M. of Monday, the second day of April, 1888, and at that time will be opened and read in the presence of the bidders or their representatives.

Bidders are required to state in their proposals, under oath, the names and residences of all the parties interested therein, whether as individuals or business firms and companies.

Bidders are required, with each proposal submitted, to inclose a certified check in the sum of one thousand dollars (\$1,000) as a forfeit to the Water Company in case of a refusal, for any reason, to promptly enter into a contract and bond on the part of any bidder to whom the work may be awarded.

Bids must be made upon the accompanying blank form, in the filling up of which the price must be stated, both in written words and figures. Any bid submitted otherwise will be declared informal and rejected.

The person or persons to whom the contract may be awarded will be required to appear at the Water Company's office, with acceptable bondsmen as sureties, and execute the contract within six days from the date of notification that the work has been awarded to him or them; and in case of failure or neglect so to do he or they will be considered as having abandoned it and as being in default to the Louisville Water Company to the amount of the check deposited with the proposal as liquidated damages.

General plans and detailed drawings, with the specifications, can be examined at the Water Company's office from 9 A. M. to 5 P. M. until the day the bids are opened.

Not less than two bondsmen will be required from the party to whom the contract may be awarded, and the amount of the bond shall be \$5,000, for which sum the bondsmen shall be jointly and severally liable as a guarantee that the party entering into a contract for the above work shall, within the time specified, fulfill the obligations of the contract.

The sufficiency, solvency, character and business standing of the bondsmen shall be acceptable to the Water Company.

The Water Company reserves the right to reject any or all proposals submitted.

LOUISVILLE WATER COMPANY,
By CHARLES R. LONG, President.

A Kentucky Town.

PRINCETON, KY., February 6, 1888.

Editor Manufacturers' Record:

Princeton, the county-seat of Caldwell county, Kentucky situated in Southwestern Kentucky, thirty miles from the Illinois line, and thirty-five miles from the Tennessee line, has a population of 2,500 and has three railroads in actual operation, all of which are parts of important systems, and afford direct connections, within twelve hours, and less, respectively, with Chicago, St. Louis, Evansville, Memphis, Nashville, Cincinnati and Louisville. The roads are, viz: Newport News & Mississippi Valley, which, with its connections, spans the continent from Newport News to San Diego; the Ohio Valley, connecting at Evansville with roads running north—now finished south to Princeton, and to be extended with the opening of spring to Nashville, and the Clarksville & Princeton branch of the Louisville & Nashville. We have two roller-patent flouring mills in regular operation, having a capacity each of about 200 barrels a day; a cigar factory, an extensive furniture factory, a carriage factory, four extensive tobacco stemmeries, and two saddle and harness manufactories. Caldwell county is above an average in the State in point of agricultural importance, shipping annually from Princeton about 6,000,000 pounds of tobacco, 15,000 hogs, 3,500 cattle, 5,000 sheep and 1,000 mules. In mineral resources, Princeton has abundant supplies of hematite iron ore, on the lines of her railroads, within a range of from three to twenty miles; limitless supplies of the best Kentucky coal, within twelve miles and on two of her roads; immense quarries of the finest building and ornamental stone, including white, gray, blue and mottled limestone; extensive forests of hardwood timber, including red, white, black, Spanish and post oak, red and yellow gum, black walnut, poplar, beech, birch, sugar-tree, &c., &c. In a word, Princeton's resources in crude materials, water supply, healthfulness of location, and shipping facilities, surround her with advantages and attractions for the establishment of any manufacturing interests equal to those of any point in the South.

J. K. McGOODWIN.

A Shenandoah Valley Town.

MIDDLETOWN, VA., Feb. 10, 1888.

Editor Manufacturers' Record:

Middletown is situated in the Shenandoah Valley, Frederick county, Va., on the line of the Baltimore & Ohio Railroad's valley branch. It has fine water power. It is located in the best agricultural section in the valley. The Shenandoah Valley is widest at this point, it being 30 to 40 miles wide, with Middletown situated midway between the two ranges of mountains. A new roller flour mill, capacity 50 barrels per day, has been recently erected at this point. There are also here the following: A large woolen mill known as the Valley Woolen Mills, owned and operated by Messrs. Timberlake & Maslin; a planing and grist mill and lumber yards owned and operated by Messrs. Randall & Guyer; a creamery, by Messrs. J. M. Long & Co.; a lime kiln and merchant mill by W. & J. Hattel. Several canneries, cheese factories and other industries will be erected and in operation within the next few months. The valley turnpike, reaching from Winchester to Staunton, passes directly through the town. This will also be the terminus of the Capon Springs & Middle-town Turnpike, which needs only 6 miles of grading to complete to this point. This road will be the outlet to the nearest railroad point for a large territory in Virginia and West Virginia. It will reach large tracts of splendid timber and fine iron and manganese deposits, which have never been operated for the want of a good road to the railroad. It will also be the transit point for the travel to the famous

Capon Springs. A society was organized recently at the instance of Mr. M. V. Richards (now at the head of the Land and Immigration Department, Baltimore & Ohio Railroad), which is known as the Middleton Immigration & Industrial Improvement Society. Thos. Maslin is president, and C. B. Guyer, secretary. This society will furnish information to parties looking for new locations, and will negotiate sales of farms free of any charge to buyers or sellers. The best citizens of the country are connected with the association. Farms can be bought from \$10 to \$50 per acre, well improved and fine lands.

SHENANDOAH.

Maryland's Governor Buying Southern Lands.

Mr. A. C. Cannon, representing E. E. Jackson & Co., of Maryland, returned yesterday from Florida, where he went in company with Mr. T. J. Scott to buy up some pine lands.

It will be remembered that Jackson & Co. bought up 85,000 acres of government lands in Geneva and Covington counties, in this State. The lands were located and purchased by Mr. Cannon. In Florida he bought 35,000 acres of land for the company, the body running down to within four miles of De Funiak, and commencing with the lands of the former purchase on the southern borders of this State. This gives the company 120,000 acres of land in a solid body, heavily timbered with yellow pine.

Mr. Cannon informed an Advertiser reporter last night that the company proposed to build a railroad from De Funiak in this direction to tap their pine lands. He thinks it very probable that a connection can be made with the Montgomery & Florida Railroad if it is extended on down the country towards Florida. The company's plan is to begin the construction of the road in the latter part of next summer, nearly in the fall. The idea is to tap the lands with the railroad, build saw mills and work up the wealth of lumber interests in the pine forests.—Montgomery (Ala.) Advertiser.

THE indications for securing low rates for immigrants to the South are said to be very favorable. When the railroads make the announcement (if they should so decide) then let the South make one great effort to attract a large number of well-to-do farmers, mechanics and merchants of the North and West.

Mr. Wm. C. Codd, dealer in mill, machinists' and plumbers' supplies, Baltimore, writes us that he "will exchange all kinds of machinery for lumber, f. o. b. Baltimore. Have lot of second-hand gold mining machinery, also perfect hand fire extinguishers, that I will exchange for lumber. I want prices on 100,000 balusters, 3x3x28 inches, No. 1 walnut; also 2x2x36 inches, ash, f. o. b. Baltimore."

"HOW TO SUCCEED AS A STENOGRAPHER AND TYPEWRITER, 12 MO., paper, price 25 cents, Fowler & Wells Co., publishers, 775 Broadway, N. Y.

This manual for the shorthand student and writer, considers among other things the advisability of learning shorthand, the time and practice required; the percentage of failures; the choice of system, and the advantages to be derived from its study; the average of speed required, also where to seek a situation; the reporting of evidence; the rates charged, etc.; the reporting of meetings, lectures, etc., with a great deal of information of interest to every shorthand writer and student; also a department on type-writing, the qualifications necessary; speed, rules for the use of capital letters and punctuation, how to get business, salaries, etc.

Baltimore Stock Exchange Quotations.

Reported by ALEXANDER BROWN & SONS, Bankers, Baltimore.

BALTIMORE, Feb. 15, 1888.

	MD.	ASHED.
Virginia 6's Consols C.....	40	..
Virginia 3-4's 10-40's.....	36 1/2	..
Virginia 3's, new.....	66 1/2	..
Virginia 10-40 Coupons.....	86	..
Atlanta & Char.....	85	..
W. & A. Col. & Aug.....	110	..
Rich. & Dan. Gold, 6's.....	103	..
Va. & Tenn. 6's.....	103 1/2	..
W. & W. 5's.....	110	..
W. & A. Col. & Aug. 6's.....	117 1/2	..
Atlanta & Char. 1st, 7's.....	120 1/2	..
Atlanta & Char. Income, 6's.....	108 1/2	..
Col. & Green. 1st, 6's.....	109 1/2	..
Col. & Green. 2d, 6's.....	83 1/2	..
Va. Midland, 1st, 6's.....	119	..
Va. Midland, 2d, 6's.....	118 1/2	..
Va. Midland, 3d, 5-6's.....	109 1/2	..
Va. Midland, 4th, 3-4's.....	74	..
Va. Midland, 5th, 5's.....	201	..
Char., C. & Aug. 1st, 7's.....	119	..
Char., C. & Aug. 2d, 7's.....	112	..
West Va. Central, 1st, 6's.....	106	..
Ge. Pacific 1st, 6's.....	108 1/2	..
Cape Fear & V. Valley 6's.....	96	97

ARCTIC ICE MACHINE MFG. CO.

Works, 4, 6, 8 & 10 West Street, Cleveland, O.

Manufacturers of Machines for Making Ice and for Refrigerating Breweries, Pork Houses and buildings of all kinds requiring a steady, low temperature. Over 100 of our machines now in use. Send for any particulars desired. P. O. Box 22, Cleveland, Ohio, or P. O. Box 348 Cincinnati, Ohio.

FOR SALE. Second-hand De Le Vergne Ice Machine, rated 36 tons daily capacity. Is composed of two complete machines coupled together which will be sold as one, or each separately, as desired.

ANGLO-AMERICAN PROVISION CO.

Chicago, Ill.

STEEL RAILS

COMPLETE OUT-FIT FOR

Logging, Mining and Plantation

RAIL AND TRAM ROADS.

Light Sections Rails and Spikes in stock.

Locomotives, Logging Cars, etc.

NEW AND SECOND HAND.

HUMPHREYS & SAYCE,

OFFICE NO. 1 BROADWAY, N. Y.

FOR SALE—SECOND-HAND
Railway Equipment.

We offer the above at low prices for cash or on easy terms or Car Trust; or will exchange for good securities. Whether you wish to buy, sell or trade, it will pay you to write us for full particulars.

THE NEW YORK EQUIPMENT CO.

Successors to Walkley & Co.

10 WALL STREET, NEW YORK.

JAMES IRVING, Pres. L. V. WALKLEY, Secy.

—FOR SALE.—
Second-Hand Machinery

One Gray & Wood Planer, made by the S. A. Wood's Machine Co.

One Six-Rolled 24-inch Planer and Matcher, Goodell & Waters.

One 20-inch Planer and Matcher, Frank & Co.

Two Sweepstake Planers and Matchers, Rowley & Hermance.

Also a full line of new and improved wood-working Machines. Correspondence solicited.

Williamsport Machine Co., Limited,

Cor. West Third & West Streets, Williamsport, Pa.

FOR SALE

1 60 in. x 16 ft. Lathe. Nearly new.
1 36 in. x 10 ft. Lathe. Good order.
1 30 in. x 16 ft. Lathe. Good order.
1 22 in. x 12 ft. Lathe. New, Star.
1 12 in. x 8 ft. Lathe. New, Young.
1 Planer, 36x12, and 1 36x16 ft.
1 Planer, 24x12, and 1 24x16 ft.
1 Pulley Lathes, 26 and 36 in.
1 Forster's Stone Breaker. Good order.
1 Broom Handle Lathe.
1 Planers and Matchers.
Surfacers, Band Saws, etc.

Send for circular of New and Second-Hand Tools.

W. H. ROBERTSON,

48 South Canal Street, CHICAGO, ILL.

SELLING
OUT.

We are offering our ENTIRE STOCK of Machine Tools SHAFING, &c.,

at prices below factory cost, preparatory to CLOSING OUR BUSINESS in February.

Send for our lists before purchasing your Tools elsewhere, and save money.

FRASER & ARCHER,
121 Chambers Street,
NEW YORK.

FOR SALE CHEAP.

One No. 6 Buffalo Forge, with water tank for power; new.
One No. 1 Keystone Forge; second hand.
Two No. 1 Delamater Pressure Pumps, 1-inch suction, 1 1/2-inch discharge; new.
One No. 3 Blake Pressure Pump, 3/4-inch suction, 1-inch discharge; second hand.
One Power Boiler Plate Pumps, punches 1/4-inch hole; second hand.
One 12-in. by 30-in. by 9 ft. Bed Planer; second hand.
One 12-inch Shaper, New Haven Co.'s make; used one month.
Complete Steam Laundry Outfit; used 3 months.
One No. 6 Friedman Injector.
One 2 horse power Lawson Gas Engine.
One Combined Engine and Boiler, 3 horse power.
One 2 horse power Vertical Engine.
One 1 horse power Vertical Engine.
One 1 horse power Vertical Engine.
One 1 horse power Vertical Engine.
One 1 horse power Vertical Engine.
One 15 horse power Horizontal Engine and Boiler.
One 25 h. p. Portable Engine and Boiler, on skids.
One 8 horse power Horizontal Engine and Vertical Boiler combined.
One 8 horse power Yacht Boiler.
One 12 horse power Vertical Boiler.
One 15 h. p. Vertical Boiler, with submerged tubes.
One 30 horse power Stationary Tubular Boiler.
One 30 to 60 horse power Automatic Engine.
One lot of Gold Mining Mach'y; used but a short time.
One latest patent Quiller; second hand.
One Heater and Lapper; second hand.
One 24-inch Picker; second hand.
Four 33-inch Cotton Cards; second hand.
Pair of Hoisting Engines, 6 1/2x12 in. Cylinders on bed plate 5x5 1/2 feet, second hand.

MACHINIST AND MILL SUPPLIES.

WM. C. CODD,

2010 and 2012 Aliceanna Street

BALTIMORE, MD.

Second-hand Machinery in Good Order.
FOR SALE CHEAP.

1 Engine Lathe, 30 in. x 20 ft.
1 Engine Lathe, 26 in. x 24 ft. Triple Geared.
1 " 36 in. x 7 ft. 1 Engine Lathe 18 in. x 8 ft.
1 " each 24 in. x 20 in. and 24 ft.
1 " 24 in. x 10 ft. bed. Field.
1 " 3 in. x 25 ft.
1 " 24 in. x 15 and 26 ft.
1 " 26 in. x 20 ft.
1 " 20 in. x 10 and 12 ft.
1 each " 16 in. x 6, 8 and 10 ft.
1 " 14 in. x 6 ft.
1 " 12 in. x 5 ft.
1 " 12 in. x 4 ft. and 5 ft.
1 " 10 in. x 3 1/2 ft. Foot power
1 Axle Lathe. Bement & Son.
1 Brass Turret Lathe.
1 Planer, 24 in. x 24 in. x 5 and 8 ft.
1 " 30 in. x 30 in. x 7 ft.
1 Planer, 36 in. x 36 in. x 9 ft.
1 " 34 in. x 28 in. x 11 ft.
1 Shaper, 6-in. stroke. 1 12-in. Shaper, two tables.
1 each 12, 15, 20 and 28 in. strokes.
1 Crank Planer. 6 Lincoln Pat. No. 2 Millers.
1 each 3 and 6 Spindle Gang Drills.
1 each Nos. 1 and 2 Screw Machines. Wire Feed.
1 Pratt & Whitney. Good as new.
1 375-lb. Drop Hammer. Beecher & Peck.
1 60-lb. Vertical Hammer.
1 No. 3 Ferracute Press. 1 Nut-Facing Machine.
10 Foot Presses, assorted. 8 Power Presses, assorted.
12 Punching and Shearing Machines, assorted.
2 Return Tubular Boilers, 35 H.-P.
1 National Bolt Cutter, sizes 1/4 in. to 1 in.
1 Bolt Cutter, Sizes, 1/4 in. to 1 in. included. Wm. Sellers & Co.
1 each Nos. 2 & 3 Garvin Hand Millers. Good as new
1 Horizontal Engine each 25 and 45 H.-P.
1 24 and 3 H. P. Portable Engine.
1 Shaper 13 in. stroke.
1 48-in. Boring and Turning Mill. Pond.
1 Spindle Profiling Machine.
1 Horizontal Boring Machine, 36 in. x 6 ft.
1 No. 34 Stiles & Parker Presses.
1 Also full line of New Machinery.
New York Agency TAYLOR MFG. CO., Engines, Boilers, &c. Correspondence solicited.

PRENTISS TOOL AND SUPPLY CO.,

P. O. Box 120. No. 25 Day St., New York City.

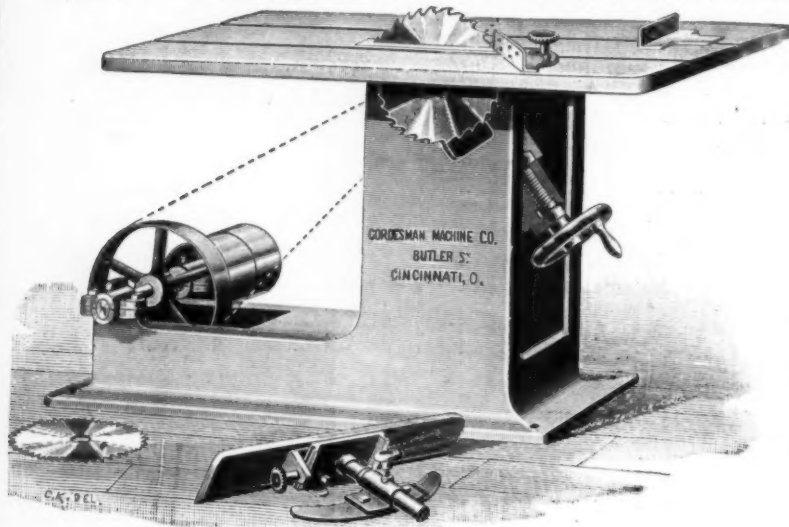
If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$3.00 a year.

No. 1 Dimension Saw.

The accompanying engraving represents a standard circular saw bench, made from new patterns, and designed for accurate and special wood work in carriage, pattern, furniture, moulding and picture frame factories. In constructing this machine the manufacturers have, they say, "produced a perfect saw bench, having embodied in it every important feature necessary for good work, and

Babbitt metal. The frame carrying the mandrel and saw can be quickly raised or lowered by the screw and hand wheel at the front end of machine. It is fitted with an adjustable gib to the dove-tailed ways on the inclined frame, which is bolted with the greatest care and accuracy to main frame, and held at such an angle to the counter-shaft that the length of belt is not varied when the position of mandrel is changed.

With each machine there are furnished



NO. 1 DIMENSION SAW.

the price is such as will come within reach of all parties having use for such a machine."

The frame, with extension and bearings that support the counter-shaft are cored out and cast in one solid piece and has a substantial floor support thus giving the machine greater strength and rigidity than if it were cast in separate pieces.

The iron table is well-braced and measures 2½ feet wide by 4 feet long. It is perfectly planed and has grooved ways planed in it on each side of saw, so that interchangeable cross cut and miter fences can be used. The ripping fence can be angled to any bevel, and can also be adjusted to

New Planer and Smoother.

This machine is one of the latest productions of the Egan Company, 228 to 248 W. Front St., Cincinnati, O., and is specially fitted for doing very fine smoothing and planing in all kinds of wood. It has great solidity and strength, and has a very powerful feed which permits very heavy work being done when occasion requires it, without any danger of stalling or breaking down. The frame is symmetrical, and is cored throughout, and is cast in one piece, and has internal ribs and braces at the proper places to make it very rigid, and not susceptible to vibration. The cylinder is of steel, double-belted, and carries two knives. The head cuts on the most improved principle, and the lips and chip breakers are so arranged that all tearing out and chipping of stock is prevented.

The feed consists of four large rolls, all powerfully geared on an improved principle, the two geared rolls in the bed being larger than the upper ones, which prevents all clipping of the ends of boards or gouging in, as so many so-called smoothers of the present day do. The pressure bars are placed on each side of the knife, and made so as to circle to the head, and are so constructed that no tearing out, even of loose pieces, can take place in working cross-grained panels.

The bonnet, with its pressure bar, swings clear out of the way, giving free access to the head for adjusting and whetting the

establishments, requiring a machine for planing, smoothing and finishing either hard or soft wood.

For further information and prices, address the manufacturers, the Egan Co., 228 to 248 West Front St., Cincinnati, O., U. S. A.

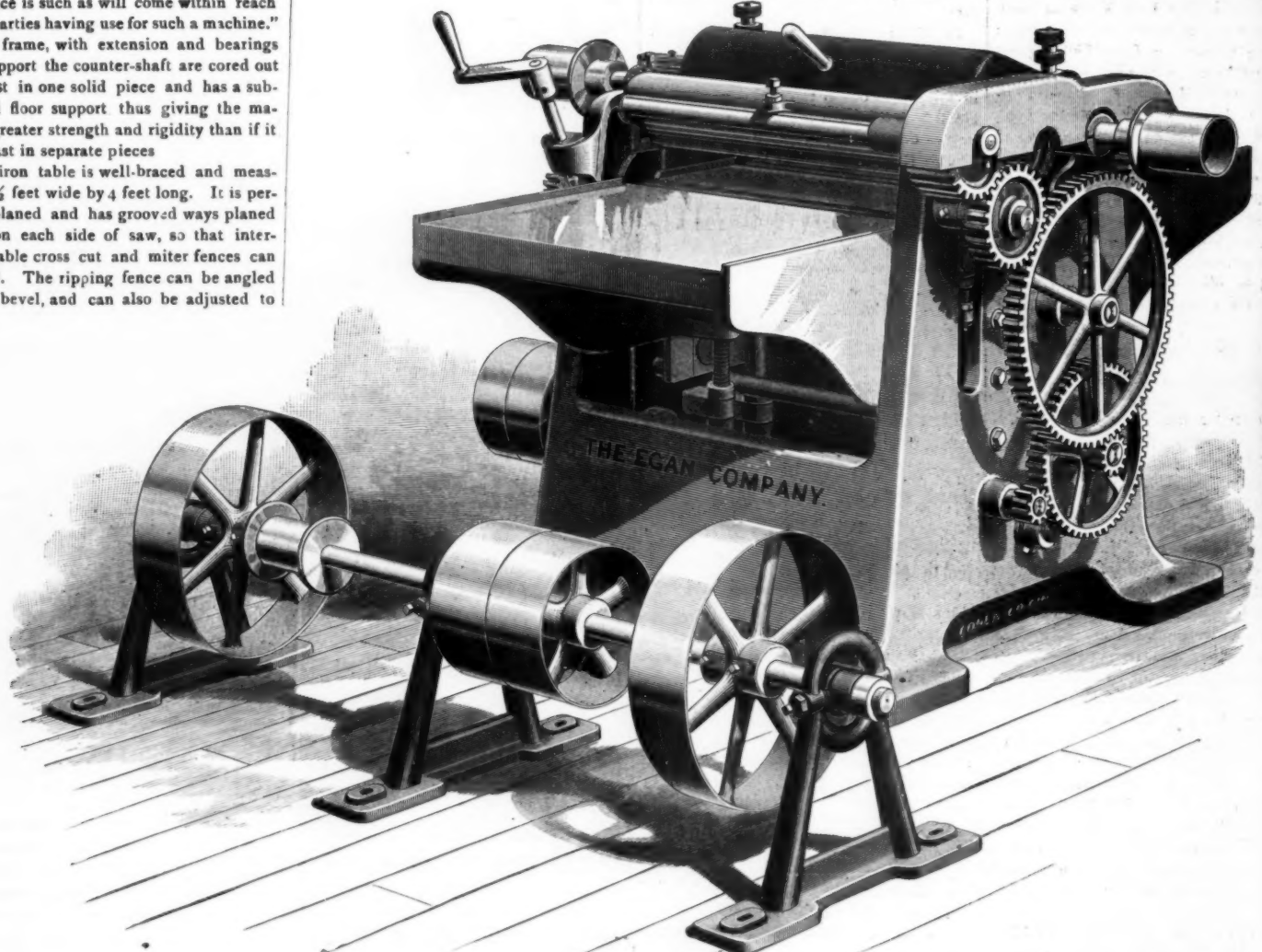
The New Wheelbarrow Wheel.

These wheels are made of the best malleable iron with bessemer steel axles, and have a split and flanged hub, to facilitate putting in the axles. They are light and neat, and, it is claimed, will outlast any other



NEW WHEELBARROW WHEEL.

wheel made. The manufacturers furnish them in two sizes, 16 and 21 inches diameter, and sell them ready for use or in parts as desired. They are manufactured by the Covert Manufacturing Co., West Troy, N. Y.



NEW PLANER AND SMOOTHER.

suit various widths of boards. All the fences can be removed in a moment's time. An opening (which is provided with a hard wood throat piece) has been cast in the table through which the saw extends. The throat piece is removable, so the groove and wobble saws, dado heads, etc., can be used.

The mandrel is made of the best machinery steel, and with its pulley is truly turned and balanced. It runs in long boxes lined with

one 12-inch rip and cross cut saws, necessary fill-up collars, saw flanges, one adjustable bevel fence, one angle cross cut fence, one square cross cut fence, wrenches, and counter-shaft.

For prices, &c., address Cordesman Machine Co., Cincinnati, O.

Subscribe to the MANUFACTURERS' RECORD, Price \$3.00 a year, or six months for \$1.50.

knives, etc. The table is gibbed in the frame, and raises and lowers in dove-tailed adjustable slides, which can be instantly adjusted from the outside to take up any wear.

The capacity of the machine is large. It will plane twenty-six inches wide and six inches thick, and is specially adapted for work in furniture, chair, and bracket factories, planing-mills, and general wood-working

Mr. L. S. BROWN, district passenger agent of the Piedmont Air Line, office 1300 Pennsylvania avenue, Washington, D. C., has received the appointment from the Commissioner of Agriculture of the different Southern States as Commissioner of Immigration. Mr. Brown has filled responsible positions on many of the best roads in the South, and has a practical knowledge of the climate, lands and mineral resources of the South and is well fitted for the position to which he has been appointed.

To Secure SOUTHERN TRADE
ADVERTISE IN THE
MANUFACTURERS' RECORD.

DECATUR, ALA.

Offers outside investors better inducements to locate than any other

 CITY IN THE SOUTH. 

AS A CITY OF Mammoth MANUFACTURING Enterprises,

She has few equals and no superiors in the South.

There have been located at Decatur in the last four months the following Industries :

THE DECATUR LAND, IMPROVEMENT & FURNACE COMPANY. Has 50,000 ACRES of Iron, Coal, Mineral and Timber LANDS
The Louisville & Nashville Railway Car Works. Cost of Buildings, \$300,000.

Charcoal Company's plant, costing \$120,000.

A seventy-ton Charcoal Iron Furnace, costing \$190,000.

A one hundred-ton Blast Iron Furnace, costing \$225,000.

The Decatur Iron Bridge Construction Company; cost of plant, \$100,000.

The American Oak Extract Company's plant, costing \$60,000.

Ivens & Sons Steam Boiler and Engine Works, costing \$100,000.

Morse Cotton Compress plant, costing \$60,000.

Decatur Lumber Company, Saw and Planing Mills, costing \$50,000.

Berthard & Co., Sash, Door and Blind Factory, cost \$15,000.

The Decatur Street Railway Company.

The Telephone Company.

Brush Electric Light Company, cost \$10,000.

The Ironton Wheelbarrow Company, cost \$25,000.

Howland & Co's Water Works System, costing \$200,000.

Bleymeyer Artificial Ice Company, cost \$10,000.

Four Mammoth Brickyards.

Jones, Poley & Co's Lumber Yards.

The Hoosier Mills & Building Company.

The Gate City Sash & Door Company.

Arantz Bro's Mills and Lumber Yards.

Grant & Co's Furniture Factory.

Southern Lumber Company.

H. S. Freeman's Mills and Lumber Yards.

The Alabama Farmer's Friend Fence Machine Company.

The Decatur Artificial Stone Company.

Decatur Chain and Architectural Iron Works, capital \$100,000.

Natural Gas Company, capital \$200,000.

First National Bank, capital \$100,000.

The Exchange Bank of Decatur, capital \$100,000.

Merchants' Insurance Company, capital \$100,000.

Decatur Building Association, capital \$300,000.

Decatur Building Company, capital \$1,000,000.

Buchheit's Bottling Works.

Decatur Printing Company.

Two daily papers, three weekly papers.

Two hotels are building—one \$60,000, one \$300,000; the largest in the South.

Grand Opera House, \$100,000.

THERE ARE OTHER

Mammoth Enterprises

Locating here, and contracts are being made with some of the most extensive industries in the United States.

Decatur is the Healthiest city in Alabama, the death rate among whites for 1886 being only 11 in 1,000.

Decatur Land, Improvement & Furnace Company,

E. C. GORDON, President.

H. G. BOND, Vice-Prest. and Gen. Manager.

W. E. FOREST, Secretary.

This Company has been pre-eminently successful in promoting the interests of the city of Decatur.

CORRESPONDENCE SOLICITED WITH PARTIES SEEKING LOCATIONS.

ALABAMA'S GREAT MINERAL WEALTH

SURROUNDS THE

★ CITY OF TALLADEGA, ★

which, according to statistics, is the **MOST HEALTHFUL CITY IN ALABAMA**, and the County Seat of Talladega County.

THE CITY HAS A POPULATION OF 5,000, AND ITS POPULATION IS RAPIDLY INCREASING.

TALLADEGA is on the main line of the E. T. V. & G. Railroad, the A. & A. Railroad, and is the present terminus of the T. & C. Railroad. Work is rapidly progressing on the Birmingham & Savannah Air Line Road, between Birmingham and Savannah, and within twelve months this road will be completed via Talladega from Birmingham to Savannah, which will place Talladega on the direct line from Birmingham to deep water on the Atlantic, making

TALLADEGA ONE OF THE BEST DISTRIBUTING POINTS IN THE STATE.

THE CITY HAS

AN EXCELLENT SYSTEM OF COMMON GRADED SCHOOLS,

With a scholastic population of 500, and **THE MOST COMMODIOUS AND ATTRACTIVE PUBLIC SCHOOL BUILDING IN THE STATE.** The main building is a three-story brick, slate roof structure, well ventilated, heated by steam; has accommodations and seating capacity for 500 pupils. This school is owned and sustained by the city. All branches of English literature, foreign languages, music, the sciences and art, are taught for a nominal tuition. Among other educational institutions are the following:

SYNODICAL FEMALE INSTITUTE, Property valued at \$50,000.

D. D. & B. INSTITUTE, Property valued at \$150,000.

BLIND INSTITUTE, (in course of construction,) property valued at \$150,000.

FOSTER COLLEGE, property valued at \$150,000.

No other city in Alabama has so many educational institutions and so many public buildings.

← TALLADEGA HAS THE MOST COMPLETE SYSTEM OF WATER WORKS IN THE STATE. →

The stand pipe has a capacity of 175,000 gallons, and into this reservoir a supply of fresh, clear, pure water is pumped every day from a large spring located in the heart of the city, which discharges over 2,000,000 gallons per day. The gravity pressure from this system is 90 pounds to the square inch in the business portion of the city. The city has broad streets, well macadamized and shaded with beautiful trees, and is well lighted with a **SUPERIOR QUALITY OF GAS.** Sixty fire plugs and forty gas lamps protect against fire and illuminate the streets.

A LARGE FURNACE PLANT gives employment to thousands of hands, and makes a high grade of chilled car-wheel iron from ores, limestone and coal within ten minutes haul by rail, or an hour's haul by wagon. **FOUR LARGE LUMBER MILLS**, with an aggregate daily capacity of 200,000 feet of lumber, cut from the long-leaved yellow Pine of this country. **FOUR BRICK YARDS** are in active operation. A SASH, DOOR and BLIND FACTORY, a FOUNDRY, MACHINE SHOP, FLOUR MILL, COTTON-SEED OIL MILL, and various other industries are in successful operation, and the TALLADEGA ICE CO. cools the thrifty population with pure ice at 50 cents per hundred. Another large furnace plant will be completed within the next ten months. A Spoke and Handle Factory and many other industries are projected, with a view to early completion.

Taxable property has increased 100 per cent. within the past twelve months. The rate of taxation is limited in the city charter to half of one per cent., and the city offers an exemption from taxation to all manufacturing enterprises for a period of ten years. The county of Talladega supplies more crude material, in the way of minerals and timber, than any other county in the State. Almost within the corporate limits of the city are extensive deposits of the highest grades of limonite ores, yielding 50 to 58 per cent. metallic iron, with only a trace of phosphorus, and limestone abounds in the greatest abundance. Coal is within twenty miles by rail.

THE TALLADEGA LAND & IMPROVEMENT CO. owns 5,000 lots suitable for residences, business and manufacturing, in and adjacent to the city. Lots are donated to manufacturing enterprises, and liberal inducements offered to actual settlers. SPRING LAKE PARK is owned by this company, and it is being made the most attractive resort in the State. The lake covers an area of seven acres, and is a beautiful sheet of clear spring water. Parties seeking a healthy climate, free from malaria and epidemics, and a prosperous city, are invited to visit Talladega. Address for maps, etc.

The Talladega Land & Improvement Co., Talladega, Ala.

ATHENS, East Tennessee

THE COMING

→ Iron and Manufacturing City of the South. ←

Athens is the county seat of one of the most fertile counties in East Tennessee. The health of the city is unsurpassed, and is **ABSOLUTELY FREE FROM ALL MALARIAL OR EPIDEMIC DISEASES**. The surrounding scenery is very fine. From the main avenue the whole valley of East Tennessee can be seen, from the Cumberland Mountains on the west to the Great Smoky Mountains on the east; some of the tallest peaks east of the Rockies being in full view. **FINE MINERAL SPRINGS** are adjacent and are popular summer resorts. The society of Athens is excellent. A cordial welcome is extended to all law-abiding people locating in the town. The **EDUCATIONAL FACILITIES** are good. Beside public and preparatory schools, Athens is the seat of **THE GRANT MEMORIAL UNIVERSITY**, which has an enrollment of over 300, and whose graduates include some of the most distinguished citizens in the country. Among the industries and institutions of the place in active operation are:

THE ATHENS BUILDING & LOAN ASSOCIATION, \$250,000. **THE ATHENS WOOLEN MILLS, \$100,000.**

THE FIRST NATIONAL BANK, \$50,000.—To be increased at once.

FOUNDRY & MACHINE SHOPS, \$25,000.

FURNITURE WORKS, \$15,000.

FLOURING MILLS, \$20,000, etc.

500 men are now at work on the new railroad from Athens to the

RICHEST IRON FIELDS IN THE SOUTH.

JUST EAST OF THE TOWN.

Only eight miles from Athens are **VEINS OF RED FOSSILIFEROUS ORE 11½ FEET THICK**, and 4 to 12 miles beyond are **THE LARGEST DEPOSITS OF BROWN ORES IN THE SOUTH**. The ores of both varieties, in addition to being inexhaustible, are both superior in quality to any ores of either variety at present mined in the South. An assertion that can be sustained. Coke can now be obtained at the lowest prices, and in addition a new railroad is now projected to the Cumberland Coal Fields, only 22 miles distant. These roads will give Athens **UNSURPASSED SHIPPING FACILITIES**. The road under construction will penetrate large deposits of Tennessee Variegated Marble; also an Unopened Timbered Region, and will develop the

Largest Colored Slate Deposits in the United States.

These quarries are now being opened, and are pronounced by experts Absolutely Inexhaustible, and equal in quality to the finest Vermont Colored Slate.

The ATHENS MINING & MANUFACTURING CO.

Have alone just contracted for the erection of over

\$500,000 IN NEW MANUFACTURING ENTERPRISES

At Athens, including a 100 ton Blast Furnace, cost \$200,000; Cotton Mills, cost \$150,000; Furniture Works, employing 200 men, cost \$100,000; Hotel, cost \$60,000; Water Works, Street Car Lines, &c. These improvements have been commenced which, added to other improvements projected, will add

\$1,000,000 OF NEW MANUFACTURING ENTERPRISES TO ATHENS.

The company desire to open correspondence with parties desiring to locate, and will extend liberal inducements in addition to gifts of sites in order to induce New Manufacturing Enterprises to locate in Athens. City property is doubling in value every few months, and at present low prices is beyond question a very fine investment.

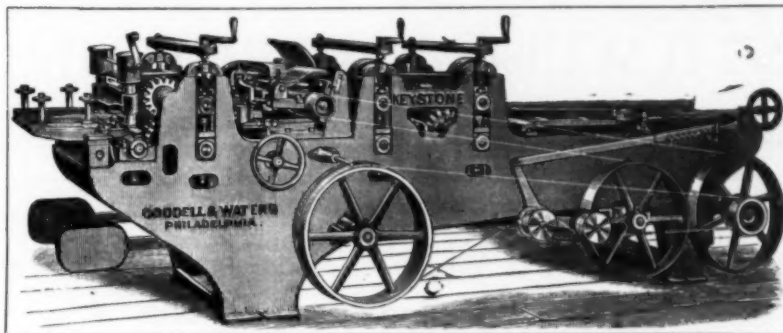
The Athens Mining & Manufacturing Company,

R. L. BRIGHT, President.

R. J. FISHER, Secy. and Genl. Manager.

"KEYSTONE"

Rapid Feed Flooring Machine.



SEND FOR DESCRIPTIVE CIRCULAR AND PRICES.

GOODELL & WATERS, Manufacturers,

WESTERN WAREHOUSES:

11 and 13 S. Canal Street,
CHICAGO, ILL.

MR. C. L. RICE, MANAGER.

3002 Chestnut Street,

PHILADELPHIA.



ESTABLISHED 1850.

To the Stove and Hardware Trade:

THE LIGHTNING ROD TRADE has undergone a change in the past few years. Formerly men with wagons traveled over the country, but now these men have almost disappeared. The business of erecting rods on houses has passed into the hands of tinner, hardwaremen and builders, and we simply manufacture them at wholesale for this class of dealers.

The people in each locality prefer patronizing a home firm, and you can just as well sell them their Lightning Conductors at the same time you are doing the tin or roofing work. We furnish printed directions, so that any one can put them up without difficulty. We also manufacture all kinds of

Weather Vanes, Glass Balls, &c.

These Conductors have received the Highest Indorsements ever issued on this class of goods, and are therefore standard. Write for prices and inclose 5 cents in stamps for samples.

MUNSON LIGHTNING CONDUCTOR COMPANY, - - Indianapolis, Ind.

Special attention given to developing Southern industries, procuring money for promoting Agricultural, Mechanical and Transportation interests, and imparting information to capitalists, as well as all seeking investments in Southern lands.

Northern manufacturers and money lenders will find it to their advantage to confer with us, as well as all persons requiring information as to plants for Cotton Mills, Sugar Mills, Saw and Planing Mills, Foundries, Car Shops, Canneries, Tanneries, Brickmaking, etc., etc.

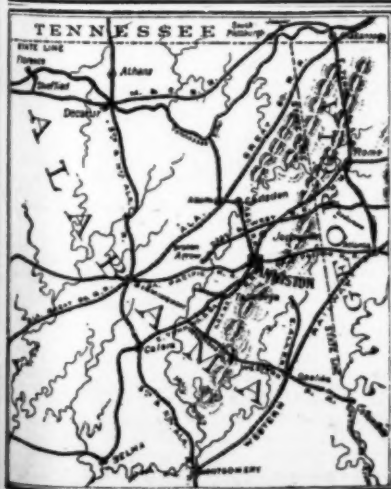
D. L. MITCHEL.

M. B. HILLYARD.

D. L. MITCHEL & CO.
Real Estate,
Loan and Information Bureau,
59 Carondelet Street, New Orleans, La., U. S. A.

REFERENCES.

Right Rev. Hugh Miller Thompson, D. D.; Bishop J. C. Keener, D. D.; Rev. B. M. Palmer, D. D.; Rev. I. L. Leucht; Hon. R. L. Gibson, Senator U.S.; Hon. E. J. Gay, Representative U.S.; Hon. Louis Bush, of Bush & Levert; Col. Wm. Preston Johnston, President of Tulane University; H. Dudley Coleman, Esq., President of Chamber of Commerce; Isidore Newman, Esq., President of Stock Exchange; K. M. Walseley, Esq., President of Cotton Exchange; Joseph C. Morris, Esq., President of Canal Bank; Albert Baldwin, Esq., President of N.O. National Bank; Geo. Q. Whitney, Esq., of Whitney National Bank; Generals E. C. Walthall and J. T. George, U.S. Senators for Miss; Hon. H. L. Muldrow, Asst. Sec'y Interior; Gen. S. D. Lee, Mississippi.



REFERENCES:

First National Bank, Anniston, Ala.
John M. McKieroy, Pres. Anniston City Land Co.

LEDBETTER & CO. LAND AND LOAN ASSOCIATION.

Incorporated.

Commission Dealers in

Lands, Stocks and Bonds.

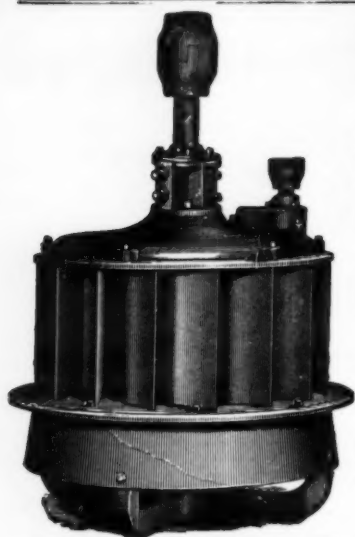
CITY AND MINERAL PROPERTY

A SPECIALTY.

Capital Stock
\$100,000

CORRESPONDENCE
SOLICITED.

ANNISTON, ALA.



The VICTOR TURBINE

Possesses more than Double the Capacity of other Water Wheels of same diameter, and has produced the Best Results on Record, as shown in the Following Tests at Holyoke Testing Flume:

Size of Wheel.	Head in Ft.	Horse Power.	Per Ct. Useful Effect
15-inch.	18.06	30.17	.8622
17½-in.	17.90	36.35	.8660
20-inch.	18.21	40.00	.8628
25-inch.	17.90	68.62	.8584
30-inch.	11.65	82.54	.8678

WITH PROPORTIONATELY HIGH EFFICIENCY AT PART-GATE.

Such results, together with its nicely-working gate, and simple, strong and durable construction, should favorably recommend it to the attention of ALL discriminating purchasers. These wheels are of very Superior Workmanship and Finish, and of the Best Material. We also continue to manufacture and sell at very low prices the

—ECLIPSE DOUBLE TURBINE,—

So long and favorably known. State your requirements, and send for Catalogue to the

STILWELL & BIERCE MFG. COMPANY
DAYTON, OHIO, U. S. A.

—DAVID BOYLE,—

521 W. MONROE STREET, - - CHICAGO, ILL.

PATENTEE AND BUILDER OF THE

BOYLE ICE MACHINE

AND REFRIGERATING APPARATUS.

The Most Simple, Reliable, Durable and Economical in Existence.

WHAT PEOPLE SAY.

"I consider it the greatest improvement that has ever been made in breweries."—FRED. PABST, President Ph. Best. Brewing Co. "We are thoroughly satisfied with your machine, and we believe it is superior to any other in the market to-day."—HENRY G. KUERT, President Atlanta City Brewing Co., Atlanta, Ga.
Estimates for Ice or Refrigerating Machines furnished on application. Refer to over 125 Machines in successful operation.

ECONOMY IN FUEL!

—SUBSTITUTE FOR COAL AND WOOD.—

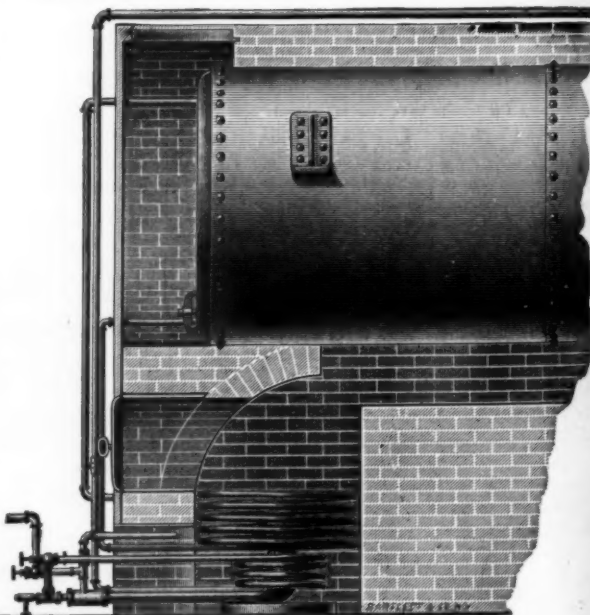
Manufactories, Public and Private Buildings supplied
with Heat and Power at half the cost of coal
or wood, by means of a new apparatus for
★ the perfect combustion of petroleum ★
and other liquid fuels.



THIS APPARATUS IS NOW BEING USED FOR
RUNNING STATIONARY AND MARINE BOILERS,
RANGES, FURNACES, GLORY HOLES, LEARS, POT-
TERY FURNACES, CHEMICAL STILLs, &c.

TRUSTEES:

Ernest T. Fellowes, Pres.
Andrew J. Constantine, V.P.
Samuel D. Bussell, Treas.
A. P. M. Roome.
Edgar M. Crawford.
James E. Miller, Sec'y.



OFFICE OF THE CRYSTAL PALACE GLASS WORKS, BROOKLYN, N. Y.
In the past four years we have experimented with a great many burners for Glory Holes, and have found the "Soory Burner" to be the most satisfactory. Having been using four of these burners for twelve months at our works with the best results, we can recommend it as safe, economical and reliable.
Respectfully,
THE E. P. GLEASON MFG. CO.

JAMES J. MURRAY & CO., MERIDIAN FLINT GLASS WORKS,
Manufacturers of Opal and Flint Globes and Shades of all Shapes for Gas, Kerosene and Electric Light Purposes.

EMPIRE HYDRO-CARBON CO., 18 Exchange Pl., N. Y. City. MERIDIAN, CONN., Nov. 7, 1887.
DEAR SIRS—We have been using your Soory Burner for the last two weeks, and it has given us much satisfaction. From the present indications we believe it produces a greater heat with the use of less oil than any burner we have heretofore used. You now have an order from us to put in two more in our two other glory holes, which we trust you will execute without delay.
Very truly yours,
JAMES J. MURRAY & CO.

No. 230 LEWIS STREET, NEW YORK, October 26, 1887.
THE EMPIRE HYDRO-CARBON COMPANY, No. 18 Exchange Place, N. Y. City.
GENTLEMEN—We have been using one of your Hydro-Carbon Apparatus under one of our hoisting portable boilers for several months past, and it gives us entire and complete satisfaction. It is so simple in construction and so easily controlled that our engineer handles it without difficulty. At the price we pay for oil, it is more economical than coal, besides taking into consideration its being entirely free from ashes, soot, dust or smoke. We cheerfully recommend it.
Yours very truly,
CONSTANTINE & CO.

OFFICE OF THE ECLIPSE LUBRICATOR COMPANY,
Greenpoint Avenue and Newtown Creek, BROOKLYN, September 14, 1887.
EMPIRE HYDRO-CARBON CO.
GENTLEMEN—We take pleasure in stating that the oil burner which you placed under our boiler gives us entire satisfaction, doing all that you claim for it, and we consider it a decided success.
Yours, etc.,
ECLIPSE LUBRICATOR CO.—Chas. A. Miller.

EMPIRE HYDRO-CARBON CO. Office, 18 EXCHANGE PLACE, - - NEW YORK
Factory at EAST 23d STREET, - - NEW YORK
Manufacture under 25 Letters Patent. Infringers will be proceeded against according to law.

TRADE NOTES.

MERCHANT & Co., 517 Arch St., Philadelphia, Pa., are having a large demand for the Star Ventilator. This ventilator is of the newest construction, and is being purchased very largely by cotton, woolen and other mills throughout the country. Contractors and others in want of a ventilator of superior merits would do well to test by use the excellent qualities of the Star.

FREY, SCHECKLER & HOOVER, of Bucyrus, O., have just completed the erection of two factories for making fire-brick and brick for street pavements. They furnished the whole outfit and sent experts to put them in operation. One of them, The Empire Clay Co., is situated at Louisville, O., and the other at Malvern, O. The first has a 30-horse power engine, and the other a 60-horse. The fire-brick at those places is said to be excellent.

The Pulsometer Steam Pump Co., New York, have recently removed from No. 88 John street to No. 120 Liberty street. The growing demand for their celebrated steam pumps made this change necessary, and in their present improved quarters they are now busily engaged in filling orders for the "New Pulsometer." This pump is particularly adapted to mining, railroad and steamboat use, as well as gas works, sugar refineries, &c., &c. By writing them, at No. 120 Liberty street, New York, a catalogue containing full particulars as to this valuable pump can be obtained.

THE M. C. Bullock Manufacturing Co., of Chicago, report the following among recent shipments of machinery: To the Bessemer Range & Mining Co., Baraboo, Wis., one exploring hoist outfit; to the Minnesota Iron Co., Tower, Minn., one No. 3 portable boiler, mounted; to the United States Construction Co., (North Chicago Cable Railway) Chicago, one 13x18 straight line engine; to the Chapin Mining Co., Iron Mountain, Mich., one pipe driving machine and outfit for driving pipes through quicksand, to use the patent freezing process for sinking shafts; to H. C. Graves & Sons, Baraboo, Wis., one Eclipse quarry drill outfit; to Cook & Brown Zinc Co., Oshkosh, Wis., one 3 1/2-inch Automatic Eclipse drill; to the Negaunee Iron Co., Negaunee, Mich., five Swivel dump tram cars and one wrought iron mining cage.

THE Valley Iron Works, Williamsport, Pa., have just completed for the Faulhaber Church Furniture Works, Cleveland, Ohio, one of the largest double disc centre crank automatic cut-off engines in the country; its cylinder dimensions are 16x24 inches, with a maximum capacity of 258 horse-power. Its bed is of the Tangye type, with overhanging cylinder. The engine throughout is of the most modern design and is well adapted for use in electric light plants, textile manufactories, flouring mills and all uses desiring close regulation and economical use of steam. This company are at present in operation 23 out of 24 hours, and report abundant inquiry from all portions of the globe. Their trade in engines for electric lighting purposes is rapidly increasing. From present indications the Valley Works will again be compelled to "tack piece on their works."

A NEW work has lately been published by D. Van Nostrand & Co., 23 Murray street, New York, under the title of vessels and voyages. It is edited by Richard Wynkoof, A. M. of the port of New York, who was the author of two other works on the same subject, one called Documenting of Vessels, published in 1880, and the other Entrance and Clearance of Vessels in 1882. These two books have been entirely rewritten, new matter added, with the additional legislation by Congress down to the last session. Many notes of Treasury decisions will also

be found in their appropriate places. This work is designed as a hand-book for quick and ready reference, for the convenience of all connected with the marine service, and is arranged in seven parts or books, which are subdivided into chapters and paragraphs, numbered consecutively throughout. Book I treats of Documenting of Vessels; book II of Steam Vessels; book III, Merchant Seamen; book IV, Entrance and Clearance on Foreign Voyages by Sea; book V, Clearance and Entrance Coastwise; book VI, Clearance and Entrance on the Northernly Inland Frontiers; book VII, Miscellaneous Provisions. This work is said to contain all the necessary information relating to this subject, and is contained in a small volume of 208 pages carefully indexed for reference.

THE principal points of superiority claimed for the Union Boiler Solvent, manufactured by Limbert & Co., of Chicago, are as follows: "1st.—All fresh waters hold in solution more or less mineral matter, from 10 to 40 grains being the two extremes. 2d.—Lime, magnesia and other mineral deposits form a hard incrustation or scale of a stony nature on the inner surface of steam boilers and around the flues. The conducting powers of scale, compared with iron, is as 1 to 37; that is, it will take 60% more fuel to raise water to any given temperature when the scale or incrustation is 1/4 of an inch thick. 3d.—These deposits take place when the water has reached boiling point, the minerals thus precipitated forming so hard a deposit that engineers often have recourse to the cold-chisel and pick to free the boiler from its non-heat-conducting coat. Such a course not only entails a loss of time in having to blow off and shut down, but by chipping off the scale the boiler lining becomes more or less cut and scratched, and a better surface is prepared, to which future sediment may adhere. 4th.—A first-class boiler, clean and free from scale, requires but 325° of heat imparted to it to raise the temperature of the water to 320°, and should last from 20 to 30 years; but there are very few boilers that remain in good condition for over five years without expensive repairs. Union Boiler Solvent, a strictly vegetable compound, is guaranteed to remove scale of whatever standing, and by holding the mineral properties of water in suspension will prevent all formations of scale or incrustation in the boilers or around the flues. It is put up in liquid form, in barrels and half-barrels, and so'd at 65 cents per gallon. It will be shipped to responsible parties on trial for 30 days, and if test does not prove satisfactory no payment will be required. No steam user can afford to be without a boiler purge that is free from all deleterious substances, and will not injure packing of any description. Such an one is the Union Solvent."

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600 handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

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THE Palace Hotel, Cincinnati, Ohio, is said to enjoy the reputation of being the best \$2 hotel in America. 250 rooms; 140 front rooms. All conveniences and excellent cuisine.

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Treating of Loam, Dry Sand and Green Sand Moulding, and containing a Practical Treatise upon the Management of Cupolas and the Melting of Iron. By Thomas D. West, practical Iron Moulder and Foundry Foreman. Fully illustrated. Sixth edition. 12mo, cloth, \$3.50.

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THE ROBERT AITCHISON PERFORATED METAL CO.
76 Van Buren St. Chicago, Ill.

OFFICE MANUFACTURERS' RECORD, }
BALTIMORE, Feb. 15, 1888. }

Manufactured iron is still rather dull, but there is an improving tendency. We quote as follows, viz :

Steel rails are selling at about \$31.50 to \$32, and large orders have lately been placed. Pig iron is in about the same condition as last reported, and we quote as follows:

HARDWARE.

Nails are quoted as before, \$2@2.10.

Philadelphia Iron Market.

PHILADELPHIA, Feb. 14, 1888.

and the wires will tell the news much sooner than this report. The actual condition of the iron trade is strong, considering the lightness of demand. Nearly all buyers want to see which way the strike will go. If it breaks, cheaper coal will result, and possibly cheaper iron. In any event pig iron will not be scarce in this market. Consumption is large North and South. The falling off in production is in the neighborhood of 20,000 tons as against two months ago. No. 1 foundry is selling at \$21 to \$22, forge \$16.50 to \$17.50, and the demand is only of a hand-to-mouth character. Sales of muck bars have been made at \$29.50; merchant bars 1.80 to 2 cents. Merchant steel is rather quiet, although we do not hear of any restriction of production at any of our larger mills. New markets are being found for their product. Plates are selling at 2 to 2 1/10; tank at 2 2/10 to 2 3/10; steel rails at \$31.50 to \$33. Contracts have been placed within a week for about 65,000 tons in both Western and Eastern mills. The trunk lines are holding back a good many orders. There are large buyers who still believe that steel rails will sink to \$30. Old material is quoted at \$22 to \$23 for T rails; scrap is \$22 for No. 1, and \$22.50 to \$23 for selected. The Atlantic States Nail Association met last week and made prices \$2 to \$2.10. The demand is a little better, but nothing like a full output can be sold, and hence they are taking steps to form a combination which will prevent an overproduction. They think they can accomplish it this time.

Cincinnati Iron Market Report.

Specially reported by ROGERS, BROWN & Co., Pig
Iron Commission.

So far as prices are concerned there has been no change in the market in the week under review. Dealers and agents, however, report a very decided increase in number and volume of inquiries. Some of the largest buyers have entered the market during the week and placed orders for six month's contracts, indicating a belief in the future of prices. On the whole, the situation looks better than it did a week ago. The smaller buyers are generally afraid to take hold, believing prices have not yet touched bottom. Most sales agents in this market report business running considerably larger in volume than a year ago. We quote for cash:

HOT-BLAST FOUNDRY.

Ohio and Southern Strong Coke No. 1.....	19	50	00	00
" " " " " " " " " " " " " " " "	No. 2..	18	50	15
Ohio Soft Stonecoal, " " " " " " " " " "	No. 3..	17	50	15
Ohio Soft Stonecoal, " " " " " " " " " "	No. 1..	19	50	00
Mahoning and Shenango Valley Coke, " " " " " "	No. 2..	18	00	10
Hanging Rock Charcoal No. 1.....		22	00	00
" " " " " " " " " " " " " " " "	No. 2.....	21	00	10
Tennessee & Alabama Charcoal No. 1.....		20	00	00
" " " " " " " " " " " " " " " "	No. 2..	19	00	00

POSTAGE

Strong Neutral Coke.....	\$17 00@17 50
Mottled " ".....	13 25@15 75
Cold Shortlings.....	16 00@17 50

CAR WHEEL AND MALLEABLE

Southern Car-Wheel Iron.....	23	00@24	53
Hanging Rock Cold Blast.....	24	00@25	60
Lake Superior C. W. and Malleable..	23	00@23	00

Louisville Iron Market.

Specially reported by GEO. H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., Feb. 13, 1888.

There has been no improvement in the market. Buying for prompt delivery, however, has been quite active. Old rails are off, owing to buyers expecting in the spring to have large quantities offered at lower prices. Old wheels continue steady and show a slight advance. There have been but few sales, and these mainly for car-load lots in this vicinity. We quote:

FIG. 12C.

Southern Coke, No. 1 Foundry.....	\$18	50	19	50
" " " 2 "	17	50	18	50
" " " 3 1/4 "	17	00	18	00
Hanging Rock Coke, No. 1 Foundry...	19	00	00	00
" " Charcoal, No. 1 Foundry ..	28	50	24	00
Southern Charcoal, No. 1 Foundry.....	19	50	21	50
Silver Gray, different grades.....	15	00	17	00

Southern Coke, No. 1 Mill, Neutral....	16	00	37	00
" " " " " "	15	50	36	50
" " " " " " Cold Short.	15	50	36	50
Southern Charcoal, No. 1 Mill.....	—	—	—	—
White and Mottled, different grades....	15	00	26	00
Southern Car Wheel standard brands....	23	00	24	00
" " " " other brands.....	20	00	21	00
Hanging Rock Cold Blast.....	24	00	25	00
" " " " Warm	20	00	21	00

St. Louis Iron Market.

Specialty reported by ROGERS, BROWN & Co., Gay Building, 204 N. 3rd street, St. Louis. W. H. SHIELDS, Manager.

ST. LOUIS, Feb. 13, 1888.

Some round orders have been placed for pig iron in this market the last week, most of them at prices under current quotations; yet the refusal of a number of offers for round lots at 25 cts. per ton below asking prices indicates that there is a bottom to the market that is pretty well defined. Some of the furnaces that were weakest two weeks ago are now very stiff, and taking the market altogether, if there has been any change at all in the week, it has been in the direction of strength. We quote for cash f. o. b. cars St. Louis:

CHARCOAL FOUNDRY.

Missouri.....	\$19 00	\$19 50
Southern.....	10 00	10 03

COAL AND COKE IRON

Southern.....	18 50@19 00
Ohio Softeners.....	20 50@22 50

WILLIAMS

Southern 16 50 @ 17 50

Chicago Iron Market.

Specially reported by ROGERS, BROWN & Co. W.
W. BACKMAN, Resident Agent.

CHICAGO, Feb. 13, 1868.

There is no material change in the situation, but a rather better feeling is noticed. Orders come in more freely, though generally for small quantities. The unsettling of freight rates North and West has led to an active buying in a small way at the points affected. Lake Superior charcoal iron continues firm, and prices of strong and soft foundry irons have not changed since last report. It is thought that they can go much lower without materially curtailing production. We quote for cash f. o. b. cars Chicago:

COKE AND STONE COAL FOUNDRY.

Ohio (Hanging Rock) Softeners No. 1.....	31	50	00	22	50
" Blackband " " ..	32	00	00	22	50
" Jackson county " " ..	31	50	00	22	00
" Lake ore and cinder " " ..	31	00	00	22	00
Southern Coke, No. 2	90	50	00	21	00
" " No. 2½	20	00	00	20	50
" " No. 3	19	50	00	20	00

CHARCOAL FOUNDRY.

Lake Superior	\$31	50	22	50
Southern.....	\$1	50	23	00
Hanging Rock.....	\$4	03	25	00

The Only Manufacturers of Rawhide Belting in the Country.

The Chicago Rawhide Mfg. Company,

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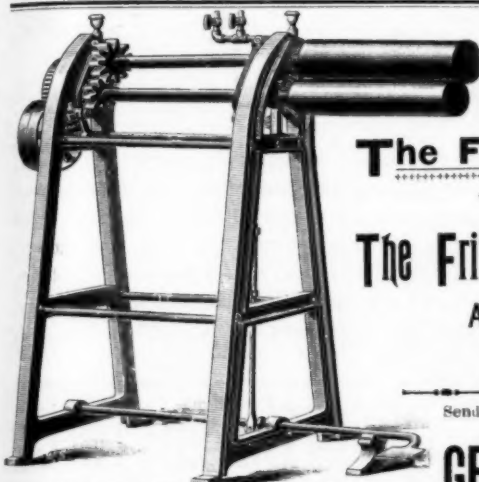
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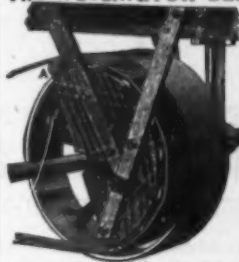
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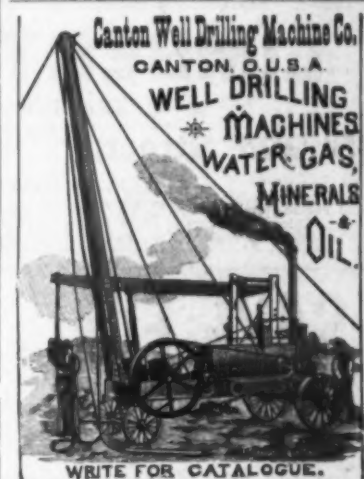
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Warranted to remove and prevent incrustations in Steam Boilers and Pipes, and not to destroy packing of any description. Put up in barrels and half barrels. By its use you will save

Fuel, Boiler Explosions and Expensive Repairs.

In order to introduce it to the steam users in the South, we will send it on trial for 30 days. If it does not stand a satisfactory test, NO CHARGE will be made. Address the manufacturers for any further desired information.

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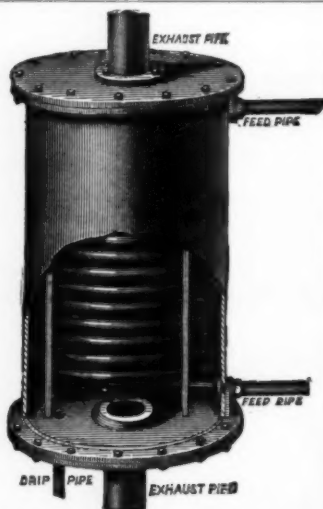
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You would save **TWENTY-FIVE PER CENT.** of the fuel required to do the same work without a

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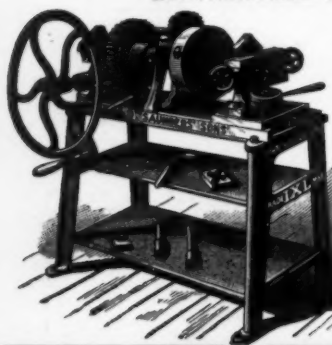
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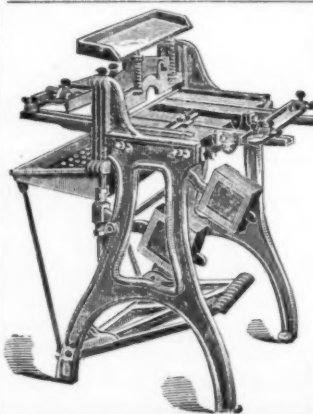
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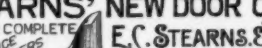
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No. 22	dis 50	5
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No. 26	dis 85	5
No. 27	dis 95	5
No. 28	dis 105	5
No. 29	dis 115	5

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No. 30	dis 125	5
No. 31	dis 135	5
No. 32	dis 145	5
No. 33	dis 155	5
No. 34	dis 165	5

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No. 35	dis 175	5
No. 36	dis 185	5
No. 37	dis 195	5
No. 38	dis 205	5
No. 39	dis 215	5

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No. 40	dis 225	5
No. 41	dis 235	5
No. 42	dis 245	5
No. 43	dis 255	5
No. 44	dis 265	5

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No. 45	dis 275	5
No. 46	dis 285	5
No. 47	dis 295	5
No. 48	dis 305	5
No. 49	dis 315	5

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No. 50	dis 325	5
No. 51	dis 335	5
No. 52	dis 345	5
No. 53	dis 355	5
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No. 55	dis 375	5
No. 56	dis 385	5
No. 57	dis 395	5
No. 58	dis 405	5
No. 59	dis 415	5

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No. 60	dis 425	5
No. 61	dis 435	5
No. 62	dis 445	5
No. 63	dis 455	5
No. 64	dis 465	5

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No. 65	dis 475	5
No. 66	dis 485	5
No. 67	dis 495	5
No. 68	dis 505	5
No. 69	dis 515	5

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No. 70	dis 525	5
No. 71	dis 535	5
No. 72	dis 545	5
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Wall Wheels.....dis 20x10 5
Stephen's Patent Vise.....dis 20x10 5

WIRE.
Brass and Copper, list of Jan. 17, 1884.....dis 20x10 5
Bright and Annealed.....dis 20x10 5
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Coppered.....dis 20x10 5
Galvanized, Nos. 0 to 18.....dis 20x10 5
Tinned, Nos. 0 to 18.....dis 20x10 5
Tinned Broad Wire, Nos. 18 to 25.....dis 20x10 5
Annealed Fence, Nos. 18 to 25.....dis 20x10 5
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Fence Staples, Galvanized.....dis 20x10 5
Japanned Barbed Fence.....dis 20x10 5
Galvanized Barbed Fence.....dis 20x10 5
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WIRE NAILS.
Standard Penny Nails.....dis 20x10 5
Wire Nails List, April 13, 1886.....dis 20x10 5

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American Adjustable.....dis 20x10 5
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Girard Agl.....dis 20x10 5
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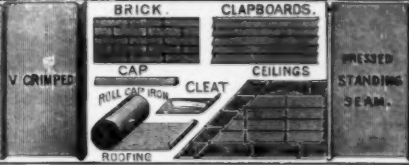
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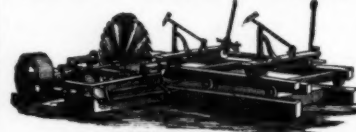
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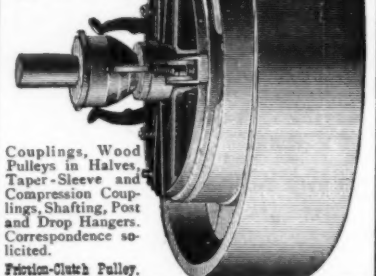
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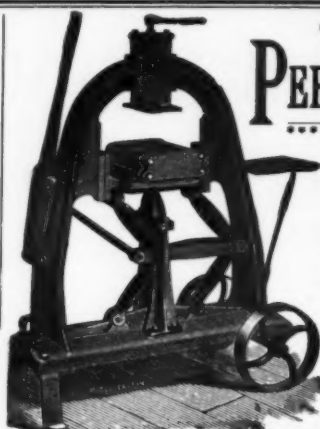
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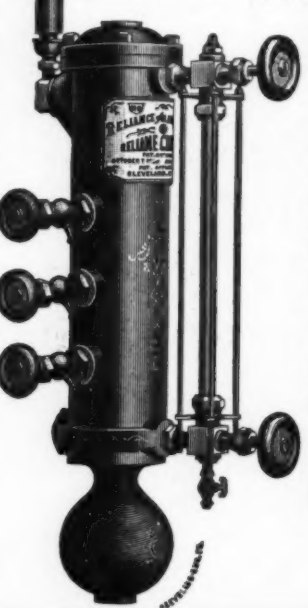
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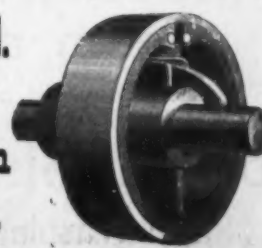
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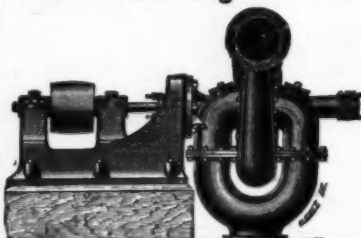
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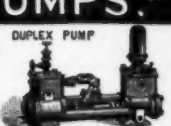
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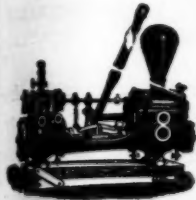
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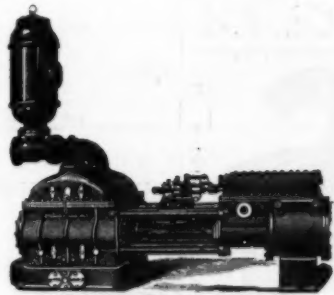
PUMP AND CONDENSER.



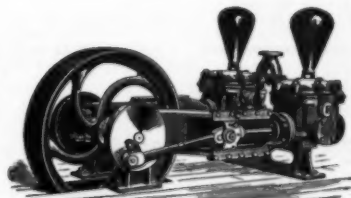
STEAM PUMP.



FIRE PUMP.



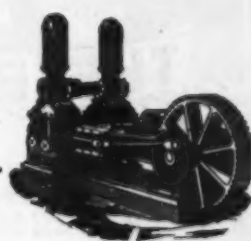
COMPOUND PUMPING ENGINE.



DUPLIX BELT PUMP.



BOILER FEED PUMP.



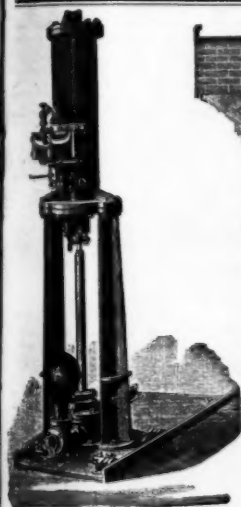
GEARED POWER PUMP.



AIR COMPRESSOR.

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ILLUSTRATED
CATALOGUE,
WITH
Price-Lists.

ESTIMATES
FURNISHED
—ON—
APPLICATION.
CORRESPONDENCE
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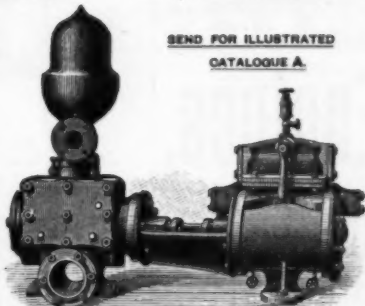
ARTESIAN WELL PUMPS.



MINING PUMPS.

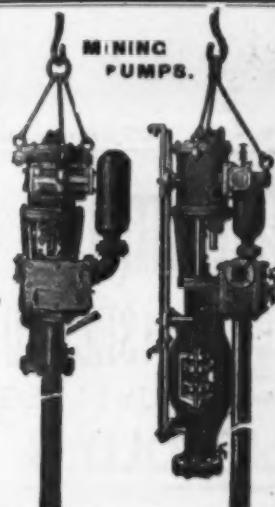
CAMERON STEAM PUMPS.

PUMPS FOR
BOILER FEEDING
MINES,
REFINERIES,
BREWRIES,
TANNERIES,
IRRIGATING,
FIRE PURPOSES,
RAILROADS &
FILLING TANKS.
CRANK & FLY WHEEL
& VACUUM PUMPS.



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EFFICIENT.
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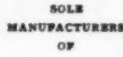
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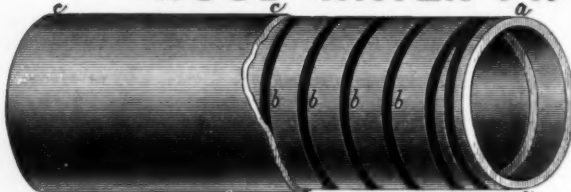
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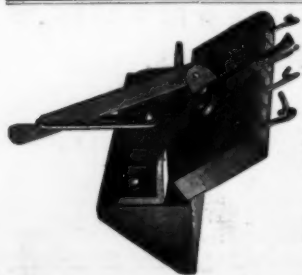
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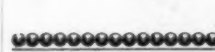
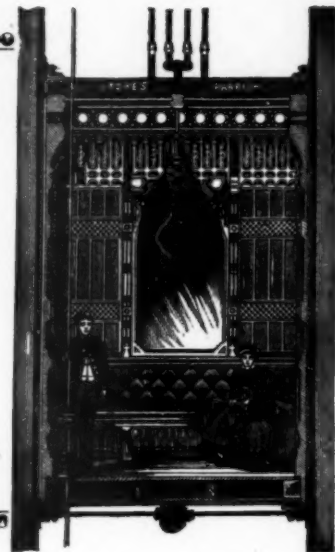
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